The Madras Medical College Magazine

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Vol. XXII. JUNE 1954.

—*By Thambuswami.*

"There is a pleasure in the pathless woods,
There is rapture on the lonely shore,
There is society where none intrudes,
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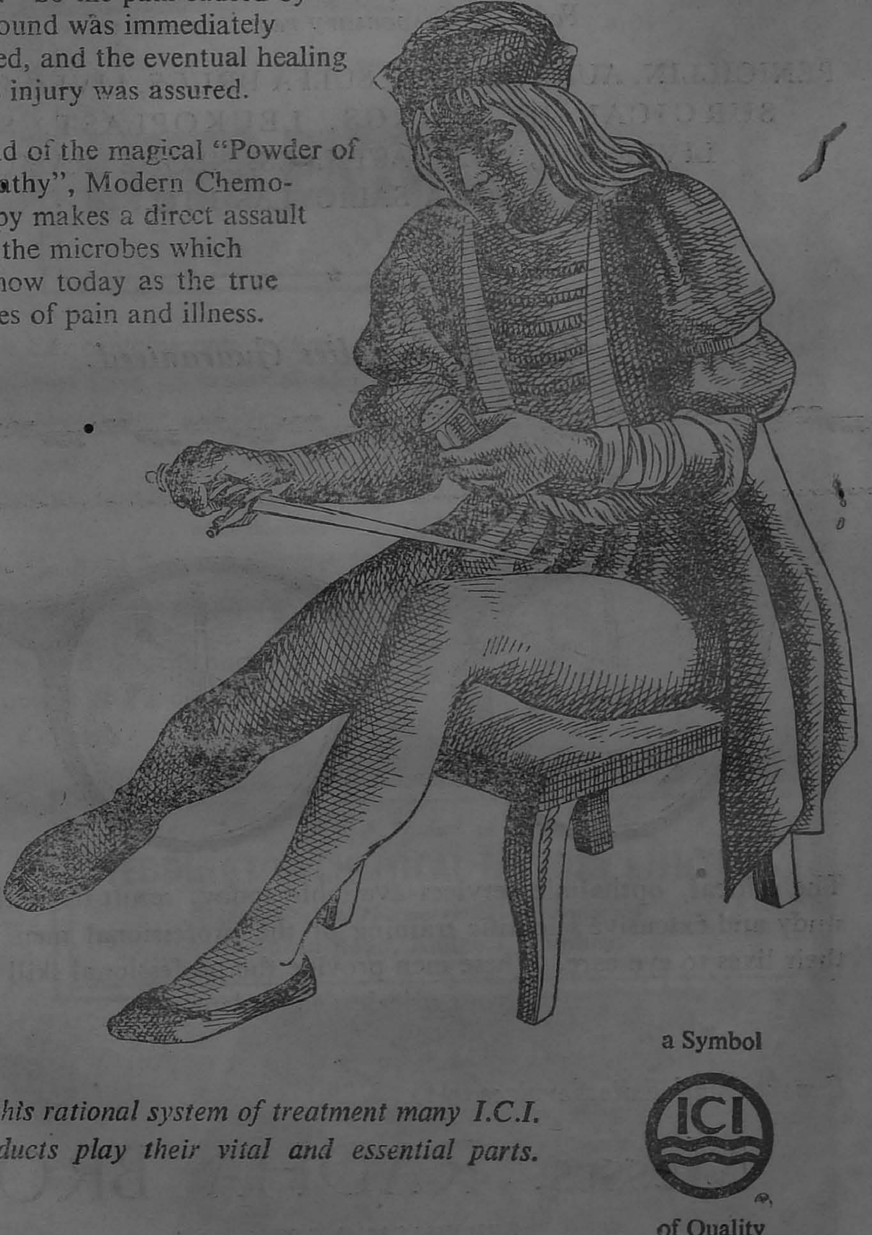

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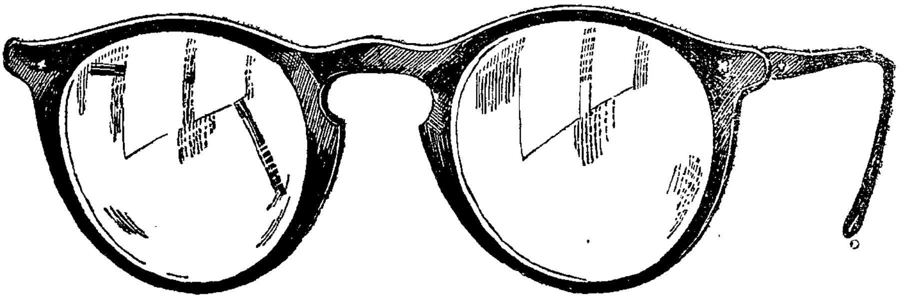

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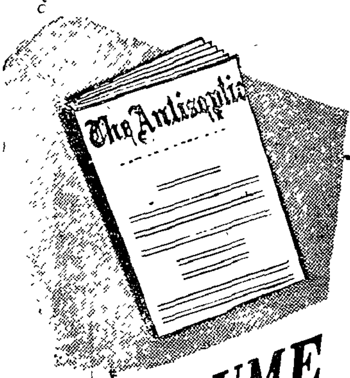

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Editorial

WE are proud to bring out this issue at a time when our country is on the verge of achieving world peace and security. Though we are glad of our success, we are greatly distressed when looking around, to find the chaotic conditions surrounding us, the constant tug-of-war for power in the name of peace. The seething cauldron of world affairs at Geneva, the massacre of innocent down-trodden millions of Indo-China, the painful uprise and the sad story of the soldiers of the freedom struggle in India's foreign pockets and many such major incidents in every nook and corner of the world only depict the sad state in which it still welters. The glory of the orient is making its voice of peace reverberate in the arena of world politics through the pleasant voice of Smt. Vijayalakshmi Pandit and let us hope that India will guide the world in the correct path towards eternal peace.

The year 1953 was an year of great success and achievement for our Hospital and College. This was a year in which we formulated and launched a variety of new activities; a symposium on Undergraduate Medical Education, the only one of its kind ever conducted in India in which the elite of the profession with many efficient student speakers of various colleges took part to make it a phenomenal success. Our medical exhibition was a great step forward towards serving our rural population with free medical aid and in making our students and members of the staff the pioneers of a unique venture which we are justifiably proud of ourselves. This was the show of the year and it should inspire our students for really hard work without which nothing ever has been achieved anywhere.

We are proud of our Hospital too. Our hospital has entered into the glorious third century of its existence and we have proved its worth by celebrating its bicentenary with great enthusiasm. We take this opportunity

to mention our success in seeing our cancer department growing into a full-fledged Cancer Pavilion, the timely need of our country. We need a hospital that will cater to the necessities of our poor masses who deserve the free expert medical care. Let us pray that our hospital grows in its full glory to serve more and more, the people.

As we go to the press, we are highly elated to receive the news of the unanimous election of Dr. Sir. A. Lakshmanaswami Mudaliar for the fifth term as the Vice-Chancellor of Madras University. We can be specially proud of him as he is an alumnus of our college and the medical profession can expect much in the way of advancement as he is our leader for years to come.

Our institution has the great tradition of turning out not only the eminent, well trained medical men, but the top ranking politicians also, when the country is in need of them. We are glad this year, to mention the event of our beloved teacher Dr. A. Srinivasan, M.R.C.P. becoming the Member of the Legislative Council who was elected from the Graduate's constituency with a thumping majority. We take this opportunity to offer him our hearty congratulations and to show our gratitude to him for all his honest, often unpalatable criticism, his timely help and valuable advices.

Great changes have come over our hospital with the separation of our Andhra friends. With the crystallising of the long cherished dream of the Andhras to form a separate state, we too in this corner think it is an achievement to get back our old friend and teacher Dr. D. S. Iyer, M.S., F.R.C.S. who is a familiar personality to everyone of us. Another great and much appreciated change is the valuable addition of Dr. Athmarama Rao, M.S. to our worthy armamentarium of erudite professors. Dr. Athmarama Rao is a perfect scholar who believes in imparting his collosal knowledge to his students and subordinates. The style of his highly instructive teaching is lucid and simple to be understood even by the amateurs of the profession. We assure you, sir, our full co-operation in fulfilling your mission of serving ailing humanity.

After striking a happy note of our achievements and successes it will be perfidy on our part if we forget our failures. The age old cry for a hostel of our own near the college has, at least for the men students again

become, a cry in the wilderness. Pray, accuse us not of being jealous. Even with great stretch of imagination, we fail to understand this 'poverty in the midst of plenty'.

We regret to note that many a time our graduates are refused the privilege to work as housemen in this institution in which they have studied five, and quite often many more, years. We are extremely glad to join our students and new graduates of the year in the right demand to be allowed to do their houseman job in this hospital itself, under the doyens of the medical profession.

With no false modesty, we want to share with you at this time, the satisfaction of having overcome a great economic crisis which faced the magazine committee this year. This would not have been possible but for the financial wizardry of Mr. N. B. Janardhanan, B.SC. and our thanks are specially due to him.

Before we conclude, we would like to place on record our deep sense of gratitude to Dr. C. S. Sadasivam, M.S. who is the outgoing Vice-President of the magazine committee. In him we had, wise counsel at the time of difficulty, appreciation of our small achievements and heart-felt consolation after our not infrequent failures. But we are not sad at his departure from us because he leaves in his stead the enthusiastic and young Dr. M. G. Prabhu, M.D. We look forward to you, sir, for your help and guidance in discharging our duties in future.

THANK YOU.

K. Bahuleyan.

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Advertisements to be included in the next Issue (October 1954) should reach the General Editor on or before 31st August 1954. The lay-out should be in typed form. Blocks and Stereos accepted.

Contributions are invited from staff, old students and students of M. M. C. and hospitals attached to it, in the form of caricatures, Drawings and articles of interest for inclusion in the next issue (October 1954) should reach the General Editor on or before 31st August 1954. Manuscripts should be original and it should be typed in double space one side only on foolscap paper. Articles of academic interest should not exceed six pages. Articles of general interest and stories should not exceed four pages.

General Editor reserves the right of refusing any matter without assigning any reason whatsoever.

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General Editor.

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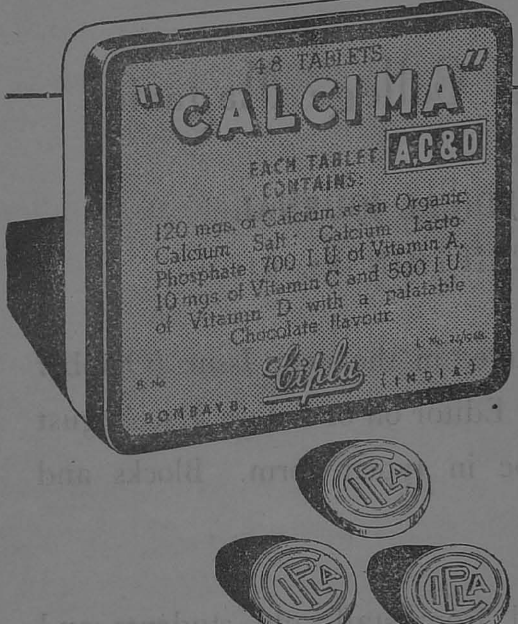

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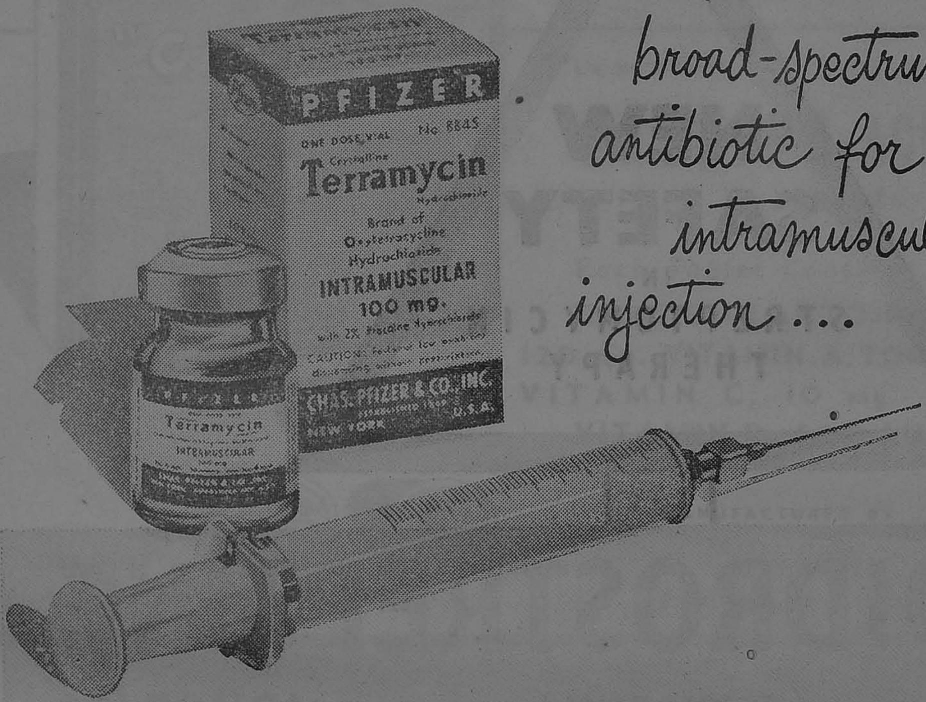

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What is Myocardial Infarction?

Dr. K. RAMACHANDRA, M.D.

MYOCARDIAL infarction is a term which is rarely used in the day to day practice of medicine though it is one which indicates with clarity the condition of the myocardium and the changes which are liable to occur as a consequence of such a pathological process. No doubt it does not convey to one the antecedent factors which have contributed to infarction of the myocardium but indicates the ultimate sequelae of certain diseases which involve the cardiac vasculature. Myocardial infarction is not a disease entity sue generis; but is a process resulting from blockage of the coronary artery or its branches. This sets the whole pathology in motion with the ultimate changes known as myocardial softening or myomalacia cardis—a serious entity which produces a variety of functional disturbances associated with a grave prognosis.

There are various terms used in a very loose sense sometimes conveying the same meaning and very often used too frequently—terms like coronary insufficiency, Angina pectoris, Coronary occlusion, Coronary thrombosis. Coronary insufficiency and Angina pectoris indicate a condition, where there is decreased supply of blood to the whole or major part of the myocardium, in one case the ischaemia is permanent and in the other temporary. Such terms should be used with great thought and accuracy to convey the correct meaning. Coronary thrombosis may be the end result of such disturbances and indicates that structural changes have taken place in the coronary arterial tree. It produces a characteristic picture which can never be mistaken for any other disease. It only requires a careful history taking and keen observation to spot this entity as it has many features which can never be fitted with any other disease often mentioned in its differential diagnosis. To mention other conditions in the differential diagnosis, only confuses the mind of the students, who lay more stress on this problem than on the diagnosis of the disease.

This condition has become a great problem in recent times as large number of individuals who look healthy and robust are smitten with coronary thrombosis. Some of them become invalids for life and a large number die. This problem was one which concerned the geriatric physician in previous decades but now it has become a disease of middle life; the largest incidence is seen between the ages of 40 and 50 years. The duration of life and longevity of individuals is limited by this disease. There is no explanation forthcoming which elucidates this feature. Probably it is the result of several factors altering the metabolic processes in the human body such as diet, psychic influences, environment etc., Psychic influence is in a great measure responsible for one's longevity and happiness and very few are free from the stress of life. At some stage or other they fall a prey to these influences, and the climateric (Andropause) is the most vulnerable period. It may to some extent explain the large incidence of vascular diseases at this age period. There are two diseases which are mainly responsible for coronary artereopathy, *viz.* Diabetes mellitus and Hypertension. Diabetes mellitus may be the cause of the arteriosclerosis or it may be a coexisting sequelae of some other metabolic disease which produces either coronary or pancreatic atheromatosis. These are all left to speculation and conjecture. Definite proof is lacking. Experimental induction of atheromatosis have been tried in birds by overfeeding with cholesterol. Such experiments may not be applicable to human beings and the same conclusion cannot be drawn as human metabolism widely varies from avian metabolism. Anyway it is clear that a large percentage of individuals who develop coronary atheromatosis belong to the diabetic group. Several members in the same family may be the subjects of these two processes and would have been victims of myocardial infarction.

The other disease where this change in the coronary vessels is noticed is Hypertension. Very often hypertension involves the branches of the coronary vessels unlike Diabetes mellitus which involves the main trunks in the majority of cases. The risk after myocardial infarction is greater in diabetics than in hypertensives due to this pathological variation.

There are other diseases which induce such vascular changes ultimately terminating in myocardial infarction; but its incidence is very small. In the absence of diabetes and hypertension-atheromatous changes can occur in the coronary vessels due to disturbances in lipoid metabolism. This is often met with in people who are on the obese side usually at the time of menopause or andropause.

Having excluded the common aeteological factors of coronary thrombosis there exist a group of individuals in whom no cause can be ascribed. The skiagram of these individuals show a widened and unfurled aorta; sometimes calcification can be noted—indirect evidence of atheromatosis; but no other laboratory proof is available to indicate a metabolic disturbance. Some of them belong to the younger age group. What has induced the atheroma is still left to conjecture It would be wiser to refer to these individuals as belonging to the primary atheromatous group.

Other artereopathies such as Thrombo angitis obliterans and arteritis do cause coronary thrombosis; but their incidence is small and need not be discussed.

Pathogenesis of Coronary Thrombosis.—Changes in the walls of the coronary vessels are primarily responsible for occlusion. The three layers of the artery get thickened by atherosclerosis with consequent narrowing of the lumen. In hypertensive individuals another factor plays an important role which may precipitate an attack. The coronary arteries are supplied by vasa vasorum which may also show similar changes as the coronary vessels. These vessels are liable to rupture producing subintimal bleeding and haematoma formation which may bulge the intima into the lumen producing coronary thrombosis or may induce thrombosis over the site of bleeding. Such a phenomenon is met with in the hypertensives. It may also be met with in diabetic atheroma. Here atheromatous ulcers which form involving the intima of the coronary vessels may be the site of thrombus formation. It is important to bear this in mind as the use of Decoumarin may not be beneficial in all cases; on the other hand it may prove harmful due to its anticoagulant property which may aggravate the bleeding.

Statistics from the Govt. General Hospital, Madras.—Within the last 2½ years 40 cases of coronary thrombosis have been admitted: of which 15 cases expired. The *average age* incidence was 49 years. The minimum age was 32 years. Maximum age was 67 years. *Sex*: Of the 40 cases 39 were males. This shows the great incidence of coronary thrombosis among men than among women, indicating thereby the metabolic disturbance which occurs in males at the climatric. This is responsible for atheroma of the arteries.

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Diabetic Coma

Dr. Sam. G. P. MOSES, B.Sc., M.D.

DIABETIC Coma is the unique complication of diabetes mellitus and it still occurs all too frequently. It may simply be defined as a stuporose or unconscious condition accompanying the more severe grades of diabetic ketosis. Prior to the Insulin era (1921) (Banting & Best) diabetic coma was an almost inevitable end of a diabetic history. However though not so at present, still it is a dreaded complication.

It is essential to know the fundamentals in the pathogenesis of the condition in order to understand and treat the condition. Numerous metabolic disturbances are involved in varying degrees and yet Insulin deficiency is one of the central aetiological factors. This Insulin deficiency may arise from a lack of secretion of Insulin, or to other conditions like antibodies, toxins and enzymes which may form during injection and render the Insulin ineffective.

Increased and uncontrolled ketone body formation from fatty acids in liver is the starting point in the pathology of diabetic coma. Various theories as to the chemical mode of formation of these ketone bodies have been propounded such as the α carbon atom or β carbon atom or alternative carbon atoms of fatty acids being oxidised or condensation of acetic acid molecules. But the most important thing to understand is that these ketone bodies are developed from fatty acids which are derived out of the "common metabolic pool" where fats, carbohydrates and proteins take part and metabolise. It may be asked that ketosis does occur in some non diabetic condition such as starvation etc., but never leads to such serious changes as in diabetic coma. It is because that in diabetes the ketosis is combined with marked depletion of the glycogen stores and limitation of power of oxidising carbohydrates even if available and the electrolytic changes occur in profound degree.

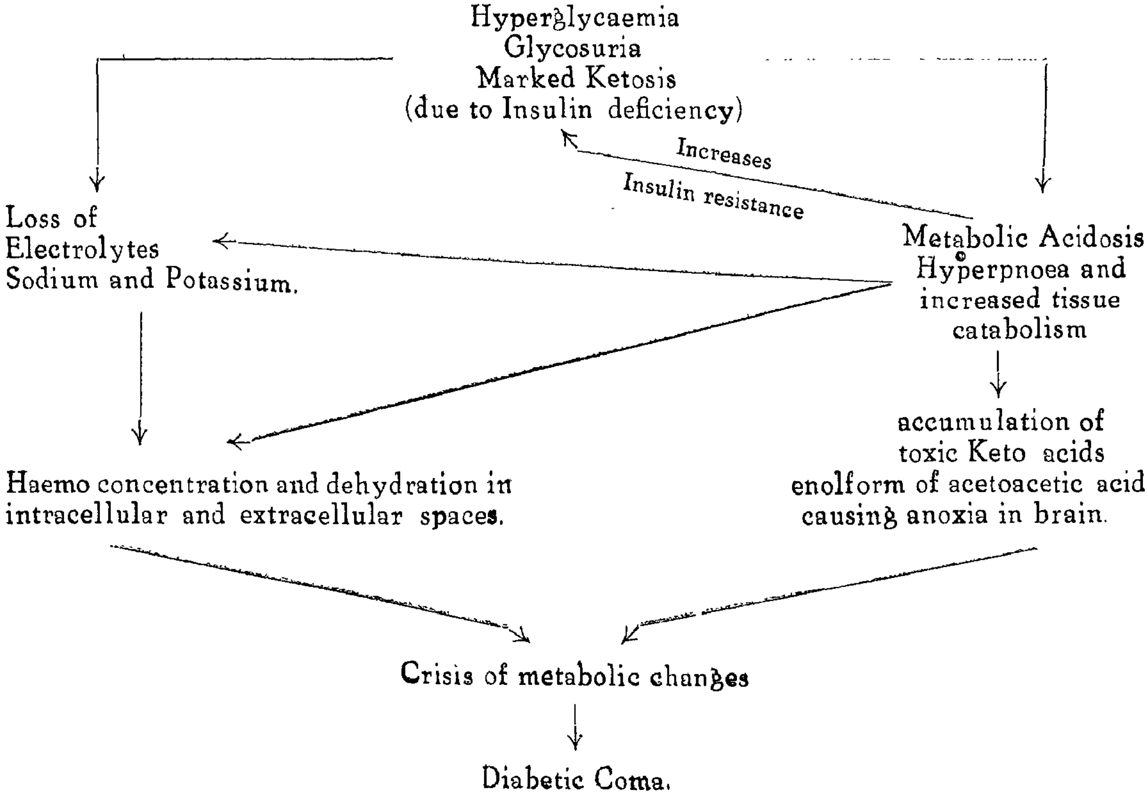
Next, the marked ketosis in the presence of the hyperglycaemia, glycosuria and diurisis leads to electrolyte loss along with the diurisis. This electrolyte loss is an important factor which leads on to cellular and

intracellular dehydration. In diabetic coma, the loss of serum potassium must be specially considered. This depletion of cellular potassium ion especially occurs during the administration of Insulin along with glucose as part of treatment of diabetic coma. This potassium deficiency leads to rapid pulse, shallow respiration and paralysis of voluntary muscles and prostration and also show the characteristic electrocardiographic changes.

The above two factors, namely, loss of electrolytes, sodium and potassium in blood and accumulation of ketone bodies result in a metabolic acidosis altering the p^H of blood towards the acid side. Acidosis itself once set up increases the Insulin resistance and thereby forms a viscious circle.

The coma itself results from various factors like the accumulation of poisonous aceto acetic acid (end form) causing tissue anoxia in the brain and failure of kidneys with complicated water and ionic balance changes and the decrease in plasma volume leading to circulatory failure. The above pathology though cannot be reversed by proper treatment can still be ameliorated and averted at various stages to prevent the harmful effects. So the main features of the condition may be summarised as follows :

A Summary of Essential Chemical Pathology of Diabetic Coma



The symptoms of diabetic coma are well known. There is no sharp dividing line between severe ketosis and precoma. Headache, anorexia, restlessness, weakness, listlessness, nausea, vomiting and abdominal pain are the early symptoms. The drowsiness proceeds to stupor and finally into coma. It is worth remembering that complete unconsciousness in a diabetic coma truely represents an advanced stage of the condition.

The clinical signs however depend upon the degree of coma. The patient is semi conscious, often moaning or grunting with a dry skin and face flushed and obviously dehydrated. It is said that even pleural friction rub can occur as a result of dehydration (Aramanino and Ory 1946). The respirations are slow long and deep " air hunger ", the so called Kussmals type of respiration. Fruity acetone odour in the breath can be detected by an experienced individual. Eye balls are soft due to low occular tension. Mouth and tongue are dry and present a dirty coating. The body temperature in the absence of infection is not raised but this finding is very variable. Pulse is rapid and weak and tendon reflexes diminished and plantar flexor.

Among the laboratory findings the urine and blood sugar estimation are essential. The urine earlier or later usually shows heavy glycosuria the presence of acetone and acetoacetic acid. Very occasionally there may be complete absence of sugar and ketone bodies in the urine associated with severe impairment of renal function and the passage of large number of casts. In these cases however, the Rothera's test applied to a few drops of blood plasma may show the presence of acetone. The blood sugar is usually though not always raised above 300 mg. %. The lowering of blood Co_2 combining power, the blood levels of acetone, blood serum, potassium, N.P.N. determination, blood chlorides estimation etc., can all be done if facilities are available. Apart from the academic interest they are not quite essential for diagnosis or treatmet of diabetic coma. Leucocytosis in blood has been recorded even without infection. This may probably be due to dehydration.

The differential diagnosis and diagnosis of diabetic coma has often been over stressed. A number of conditions like severe hypoglycaemia, Cerebral haemorrhage, Uraemia, Meningitis, Poisoning from Barbiturates etc. must be considered in the differential diagnosis. The differences, between a diabetic coma and insulin coma are only too well known and need not be detailed here. It may be probably advantageous to remember that diabetic coma comes on gradually over a period of hours whereas Insulin reaction occurs in a shorter interval and the plantar response soon becomes extensor in a hypoglycaemic rather than a diabetic coma.

Diabetic coma is a medical emergency and hence requires immediate attention and treatment. The patients are preferably hospitalised whenever

possible and in such cases prior to sending the patients to the hospital a small preliminary dose of 20 to 40 units of crystalline Insulin must be given and the hospital authorities informed of it (Wilfred Oakley 1952).

Soon after admission, after verifying the diagnosis by history, physical examination and urine examination etc., a subcutaneous dose of 40 to 60 units of crystalline Insulin can be given while waiting for the blood sugar results. Opinion is varied as to the initial dose of Insulin and the mode of administration but the chief objective is to give as much Insulin as needed in the early hours. "Give enough Insulin early" is the motto, since it is this Insulin in earlier hours that counts most heavily. A dose of Insulin similar to the initial dose can be given every hour depending upon the blood sugar urine values till clinical or chemical evidence of improvement is shown and with improvement the dosage may be reduced at increased intervals. Regular and repeated blood sugar estimations are to be preferred and especially nowadays small portable bloodsugar calorimeters are available (Zeiss Ikon type or Haemo Glukoplut ERKA etc. with which blood sugar can be determined in 5 to 10 minutes with reasonable accuracy and it is within the reach of every practitioner as it is fairly cheap.

Dehydration and loss of electrolytes is the next important pathology to be tackled. This is best done by intravenous administration of 2000 to 2500 cc. of normal saline within the first two hours. When the blood and urine sugar are getting controlled with the continued administration of Insulin, then is the time to administer potassium which must be given as 1 to 2% of Pot. chloride solution by mouth or as 0.1 to 0.2.% I.V. (Oral route must be preferred).

The opinion regarding the administration of glucose along with the Insulin in the treatment of diabetic coma has undergone a change. During the first few hours of treatment of coma preferably glucose should not be given since apart from continuing the hyperglycaemia, it may increase the Potassium loss from the serum. Further there is no evidence that this glucose administered has been in any way useful to oxidise the ketone bodies (Root and Carpenter 1943). Again under conditions of severe dehydration the added glucose may precipitate renal block by increasing intracellular dehydration (Seldin and Trail 1950). So it has been found that the cases of diabetic coma treated without administration of glucose along with Insulin stands a greater chance of recovery than the glucose treated case (Lee Naidoo and Torrens B.M.J. 1949). In view of the above proofs plain normal saline alone should be preferably used to combat dehydration.

Vitamins and antibiotics must be given as a routine as in any other case of coma. Penicillin in usual doses must be given to the comatose

patient especially in the aged to prevent hypostatic Pneumonia during the coma. Any of the attending complication of the diabetic coma, like injection coexistent meningitis etc. must be suitably dealt with.

The control of the acidosis does not always require the use of alkalies which were previously used in most of the cases. The combating of the electrolyte in balance and dehydration itself is sufficient to maintain the acid base equilibrium. If however the acidosis is severe as in severe coma, then 1/6th molar Sodium lactate solution can be given. It has been found that the use of alkalies in diabetic coma does not alter the out come in most of the cases (Kepler of Mayo Clinic).

Eliminative line of treatment like gastric lavage with warm water or normal saline must preferably be routinely done and will help the process of recovery to a large extent and a cleansing enema or bowel wash with normal saline is an equally important procedure to relieve the abdominal distress and to promote intestinal tone (John J.A.M.A. 1935).

Circulatory stimulants may be required in cases with low Blood pressure. Ephedrine hydrochloride administered subcutaneously has been found to be quite useful to prevent circulatary collapse.

The convalesence must he attended to carefully. A recurrence of the diabetic coma within a few hours after apparent recovery is not impossible and so must be guarded against. A state of drowsiness may persist for many hours after ketone bodies have disappeared from the urine and tachycardia may also be present for some days. Gentleness in nursing is a very important. Frequent and small quantities of carbohydrates by mouth must be invariably given as soon as tolerated by the patient and this will avoid the hypoglycaemia which may result from an over energetic treatment, and hypoglycaemia must be guarded against all through the treatment since a diabetic coma patient may pass unnoticed into a hypoglycaemic coma.

The prognosis in a diabetic coma may be difficult to assess. But it mainly depends upon the duration of unconscionsness, the age of the patient and other complicated conditions. The quick recognition and institution of the proper routine treatment will probably make the condition less serious.

REFERENCES.

1. Medical Emergencies Allan Birch
2. New England Journal of Medicine 1951.
3. Root and Carpenter (J.A.M.A. 1944)
4. Lee Naidoo and Torrens (B.M.J. 1949)
5. Lawrence—Diabetic Life
6. Treatment of Diabetis Mellitus-Joslin, Root, White and Marke 1952.

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"An Aspect of Experimental Medical Research in Britain"

VISHNU SARMA, M.A. Hons. (Cantab)
M.B., B.Chir., M.R.C.S. (Eng.), L.R.C.P. (Lond.)
Emmanuel College, Cambridge,
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"MY father is trying to find the cause of the common cold. Why don't you volunteer as a guinea pig?" said John who was sitting next to me at dinner in college one day. Medical students can never get away from the subject of medicine even at dinner because it is a most fascinating subject. John's father Dr. C. A. Andrewes, a bacteriologist of eminence had made substantial research contributions on the study of virus diseases particularly those causing influenza and the common cold.

Among the most frequent of afflictions to which man is subject is the common cold. The disability and absence from work it gives rise to is a problem of national importance and a serious loss to industry. Nearly 10% of all illness and 15% of all incapacity in England and Wales is caused by the common cold. It begins as a catarrhal inflammation of the upper air passages and may spread to involve the adjacent air sinuses or even into the chest.

Hot stuffy ill ventilated rooms where people gather is the best place to catch a cold particularly if there is close contact with a person suffering from a cold. Fatigue and general illhealth predisposes to this ailment. "Coughs and Sneezes spread diseases" say Health posters in England. The infection is due to a virus and may be transmitted in droplets as a person with a cold speaks, coughs or sneezes. The profuse yellow discharge that comes from the nose results from a secondary invasion by bacteria which follow in the wake of the virus. By the sensible use of handkerchieves and by stifling coughs and sneezes some limitation in the spread of the disease may be brought about, but the real answer is to encourage people with colds to remain indoors, and to ensure better ventilation in places where people assemble. As people are infectious before the symptoms and signs of cold appear cross infection can only be limited and not fully obviated.

It takes only a few hours after exposure to infection by the virus before a cold develops and the cold lasts for a week or two. Immunity is shortlived and so a person may catch another cold soon after getting over one. Apart from the headache and depression which makes one miserable, the common cold may go on to produce serious chest complications. In the elderly it is essential that a cold should not be treated too lightheartedly.

Because the common cold is such a serious social problem and so little is known about it, The Common Cold Research Unit was set up at Harvard Hospital in Salisbury in 1947 under the auspices of The National Institute of Medical Research. The buildings which consist of prefabricated huts were a gift to the Ministry of Health from the U.S. Army Medical Department at the end of the war. It is by having such ultra specialized Units sustained and nourished both by the National Institute of Medical Research and by the Government, and staffed by able and brilliant medical men studying a particular problem that it is possible to make substantial advances in medicine.

What is the purpose of this Unit? What is the scientific basis for the work they do?

If you take nasal washings or the secretions from a person with a cold and instill it into a healthy person he will also catch a cold. If these secretions are obtained and put through special filters, the pores of which are so minute that they hold back all the bacteria, the filtrate is still infectious although it does not contain bacteria. It can give rise to a cold if put into a healthy nose. The conclusion is that the organism is almost certainly a virus. The virus is smaller than that of influenza and can survive for a long time under very cold conditions. It can live for days if placed in a refrigerator. It can be recovered from dirty pocket handkerchieves dried in air. The virus can infect only the human being and the Chimpanzee. Chimpanzees are capable of catching a very nasty cold but they are not easy to come by for research purposes: nor is it likely that they will be as able to give the intelligent co-operation human beings can.

From time to time it is necessary to check up and see if the filtrate contains virus or not. It is only by testing it on human volunteers and seeing if it gives them a cold that one can find out. So at Harvard Hospital they invite volunteers and put filtrates into their nose to see if they catch a cold.

When somebody gets a really good cold it is obvious both to the suffering victim and the sympathetic observer. But if it is only a mild attack there may be considerable doubt. Some persons are easily susceptible to suggestion and may develop some of the symptoms of cold, even though they are not actually given the infectious filtrate. Therefore a system of "control" is necessary. In each trial some volunteers recieve "control" material. This is an innocuous fluid known not to contain cold virus. The bacteriologists themselves do not know the identity of the material given to them under a code number and they do not know which is control fluid and which not, until the end of the trial.

By foxing volunteers and doctors scientific objectiveness is achieved and impartiality maintained.

It is to this centre that I was accepted as a volunteer and came with Mr. G. K. P. an Indian Colleague who was a mathematician at the Benares Hindu University. We were met at Salisbury station by the hospital station waggon and on arrival welcomed by Dr. Andrewes and other members of the medical staff. A nurse led us to our flat. There were ten volunteers for the trial and most of us came from the different colleges of Cambridge. We were to share the flats in pairs (each of one sex) and the pair of us were allotted a "flat", and the period of isolation began. We were not to come within talking or shouting distance of anybody else.

The flats themselves were princely "prefabs" and the plumbing wholly American. We could not have wished for more luxurious accommodation. The walls and roof were made up of asbestos and the outside coated with a protective brown paint. The walls were painted in a pleasing cream colour and the oak floor covered by linoleum. The rooms were partitioned by insulated wooden walls. A thermostatic controlled radiator system prevented us feeling the chilly winter weather and the cold piercing winds that coming from the arctic wastes, howled across the desolate Salisbury plains. There were two bedrooms with luxurious spring beds. There was a watercloset, bath and washbasin with hot and cold running water. In the kitchen which had a larder there was an electric kettle and a store of preserves—sugar, marmalade, jam, cocoa, biscuits etc. and a fine pile of U.S. Army cutlery and George VI crockery. The living room was large and equipped with wireless, telephone, armchairs, desks, carpets and a liberal supply of electric lights, table lamps, power points, and fire extinguishers. There was even a small attractive hatchet with a red painted wooden handle to enable us make a hasty escape in case of fire.

Cards and other indoor games were provided to lessen our loneliness. The meals were excellent. Nutrition I was accustomed to but

taste was a rare virtue of the food which was left in large three tiered thermos containers along with a pint of rich milk and other appropriate liquid refreshments!

We had to remain in pairs and not mix with anybody else. The period of isolation was ten days and we could do what we wished except for morning visits by the masked and gowned doctors. We were encouraged to make liberal use of the internal telephone to converse with those in isolation in other flats. We were expected to make our own beds and wash our own dirty dishes to enable isolation to be carried out effectively. We were permitted to explore the bleak countryside but the frost covered ground and the bitter cold did not encourage such activities. Besides the heating was so efficient.

Our return railfare was given to us as well as pocket money of three shillings (about Rs. 2) daily for the ten days we spent there. What did we have to endure?

On the day following our arrival we had to submit to thorough clinical examination followed by an x-ray of the chest. A period of three days was allowed to elapse for us to develop any cold we may have caught on the train or just prior to our departure. On the third day the bacteriologist instilled the fluid into our nose. We had to tilt our head right back to enable the material to flow well into the back of each nostril. Within three days some of us had dreadful colds while others escaped. It transpired at the end of the trial that those who developed colds had received virus containing filtrates. Those who had only innocuous 'control' fluid did not get a cold proving that the elaborate arrangements to keep us isolated were indeed fool-proof. At the end of ten days my friend and I having recovered sufficiently from a nasty cold left Harvard but not before we had tried our best to enjoy a magnificent Christmas party they gave us, volunteers.

I have tried to indicate to you the manner in which a research project is planned and carried out. It receives support from the National Research Foundation and the Government who feel keenly that the ultimate control of the common cold is a matter which gravely concerns them.

With trials like these which are amply supported by human volunteers a day may soon come when the bacteriologists (one should strictly call them virologists) will discover the exact nature of the common cold virus and a method of preventing people catching colds. If they succeed they would have made not only medical history but social and industrial history, because the tremendous wastage to society brought about by the humble common cold can be obviated.

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Unipolar Lead Electrocardiography

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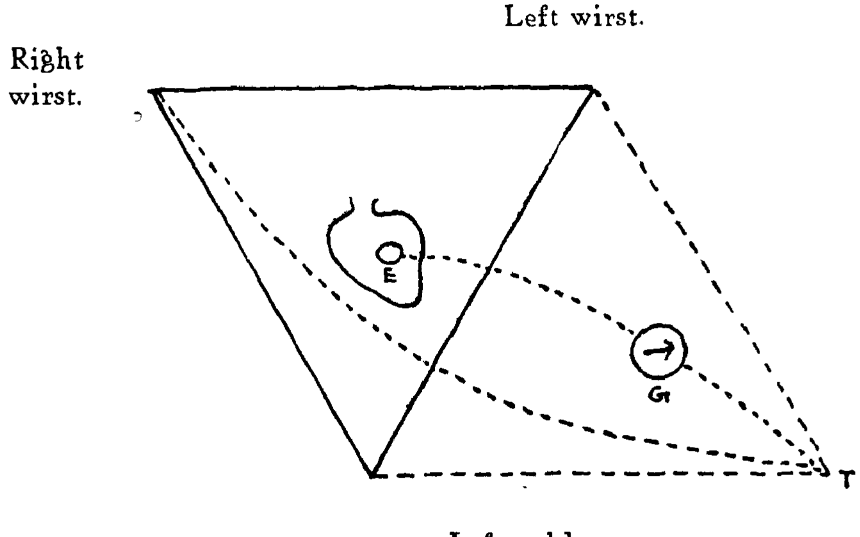
ELECTROCARDIOGRAMS are records of electrical activity of the heart. When the heart contracts, electrical potentials are set up which can be recorded by suitable and sensitive galvanometers.

The usual leads which we make use of are bipolar. Thus in Lead I we place the electrodes on both the wrists and the apparatus records the potential difference between the two extremities during the cardiac cycle. It will be noticed that we are *not* recording the actual potentials developing in the wrists, but only their difference. So we get only a comparative knowledge of the potentials, but not the actual potentials themselves. To obtain the difference in potential between the two arms which is recorded by the galvanometer, the voltage of the right arm should be subtracted algebraically from that of the left. Thus if the height of the T wave is —3 m.m. in the right arm and —1 m.m. in the left arm, the algebraical difference is —1— (—3) = + 2. (m. volt). So the T wave will be positive in spite of the fact that they are negative in both the arm leads. From the above, we realise that the bipolar leads do not show the exact potentials, but only the potential difference in the standard leads.

Unipolar leads principle.—In 1913 Einthoren and others showed that heart could be considered as the centre of an equilateral triangle which can be drawn by connecting the two wrists and the left ankle,



E = Exploring electrode.
T = Nullpoint.
G = Galvanometer.

and therefore the algebraical sum of the potentials at those points at any given instant is zero. So if we connect the three extremities to a Terminal T, then T can be called the *zero point* or the "*Null point*". Now on connecting the exploring electrode *E* to one end of a galvanometer and the other end to the Terminal T, we will be recording the electrical potential actually developed underneath the exploring electrode E, because, we know that the terminal T is a null point. Thus we have avoided recording the differences in potential. This method is known as unipolar lead electrocardiography and the leads are called V (voltage) leads. These V leads could be used to lead potentials from the chest and the limbs. When the potentials from the limb leads are augmented by making use of GOLDBERGER leads we call them AV lead. Common V leads used are,

V_1: The exploring electrode is placed in the 4th intercostal space just to the right of the sternum.

V_2: E.E. (exploring electrode) is in the 4th intercostal space just to left of the sternum.

V_3: E.E. is mid way between V_2 and V_4.

V_4: E.E. is at the 5th intercostal space in the mid clavicular line.

V_5: E.E. is at the anterior axillary line at the level of V_4.

V_6: E.E. is in the mid axillary line at the level of V_4.

AVR: The exploring electrode is in the right arm.

AVL: The E.E is in the left arm.

AVF: The E.E. is in the left foot.

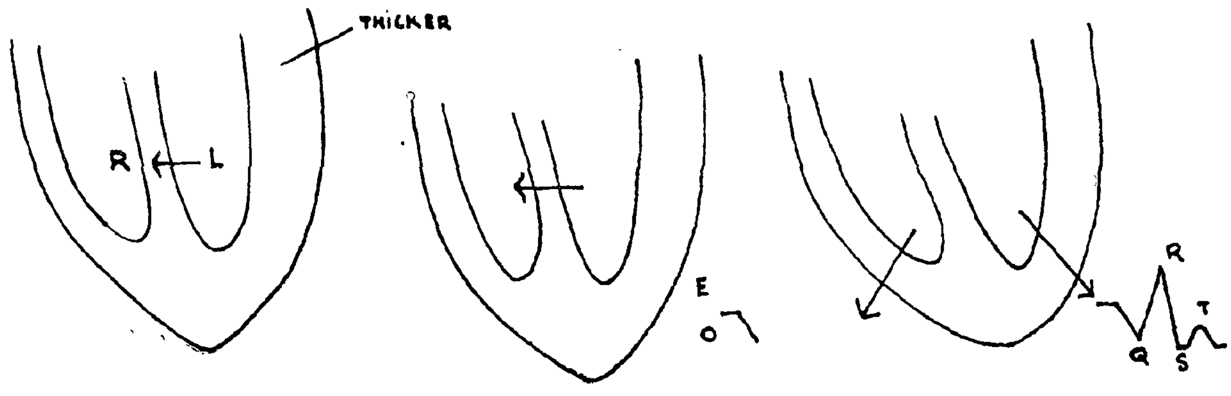
Normal spread of impulse and the Basic ventricular Patterns.—Normally the impulse starts at the sino-auricular node and from there through the auricular muscles it reaches the A-V node. Frome A-V node through the bundle of HIS, it reaches the right and left bundles. In unipolar electrocardiography we are mainly concerned with the ventricular complexes. It has been observed that the left side of the interventricular septum is stimulated first. Then the stimulus spreads outward through the walls of the left and right ventricles. In studies of electrical activity of ordinary muscle and cardiac muscle, it has been shown, (1) the point immediately in front of the wave of excitation is positive, and the point behind the excitation is electro-negative (2) as soon as the excitation wave reaches the electrode, there is a sudden deflection of the galvanometer to negativity

and this sudden deflection is known as intrinsic deflection (3) In the ventricles the spread of excitation is from the endo-cardium to the epicardium; so the ventricular cavity is electro-negative to the epicardium. From the above considerations the following principles emerge:—

(1) The intrinsic deflection in a unipolar lead signals the arrival of the excitation wave below the electrode (2) the height of R (upward deflection) bears some relation to the thickness of the underlying muscle. (3) The lead which does not show any R or S, but is negative from the beginning (Q) reflects the potential of the Ventricular Cavity.

Now we can proceed to analyse the basic patterns.

(1) **When the lead is over the surface of the left Ventricle.**—



First the left side of the septum is excited; so the galvanometer will show a small deflection down ward as (q); by now the excitation is travelling towards both the ventricles and since the left ventricle is thicker than the right, the 'q' wave is immediately followed by positive deflection, the 'R' wave.

(2) By similar argument it can be shown that when the electrode is over the surface of the right ventricle the complex must be of the r S type.

(3) Unipolar leads that face the cavity of right ventricles show r S pattern with a negative T.

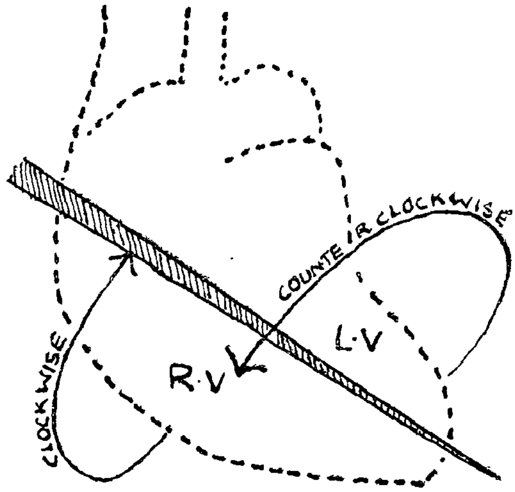
(4) Leads from the cavity of the left ventricle as already mentioned show only a Q.

VARIATION IN COMPLEXES IN HEALTH AND DISEASE

1. **Position of the heart.**—The heart can be rotated around three known areas;

(*A*) It can rotate round a vertical axis: When the apex moves to a more vertical position we call it a vertical heart and when it moves in the opposite direction it is known as a horizontal heart. The heart is considered *vertical* when AVL lead shows a Q S or rS patterns and AVL lead shows a qR or QR pattern, the *heart is said to be horizontal.* (These rules are deduced from the basic pattern already mentioned).

(*B*) The heart can rotate around its long axis. The heart is said to have rotated *clockwise* when the right ventricle comes more and more to the front: When the movement is in the opposite direction it is called an *anticlockwise* rotation. Diagramatically itmay be represented as follows:—

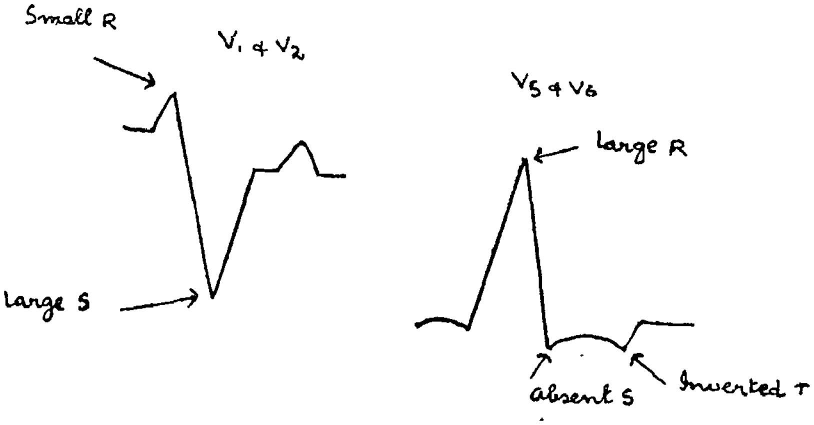


When AVR shows rS pattern there is moderate clock wise rotation. When the rotation is marked, AVR will show a Q R pattern. The heart is said to have rotated in counter clock direction when qR pattern begins in V_2.

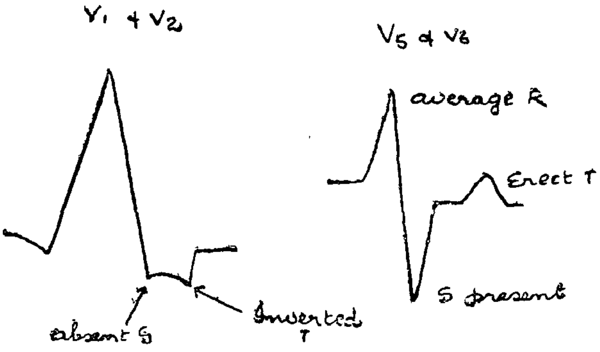
(C) The heart can also rotate around a transverse axis, in which case the apex may be rotated backward or forward. Forward rotation of the apex is said to be present when the AVF shows a qR pattern. When the AVF shows a RS pattern, the apex is rotated backward.

2. **Ventricular hypertrophy.**—There is considerable evidence to show that ventricular hypertrophy produces definite changes over the precordial leads. (1) As already mentioned the height of R wave is dependent on the thickness of the muscle and hence the thicker the muscle the taller the R wave. (2) When the muscles are hypertrophied there is some slight delay in the intrinsic deflection (3) since the hypertrophied cardiac muscle behaves like an ordinary muscle strip, RS—T and T tend to point in the opposite direction. This reversal is mathematically related to the large initial deflection in the lead concerned, the total area of Q, R, ST, summed algebraically remaining zero.

Hence in *left ventricular* hypertrophy V_1 and V_2 will show :

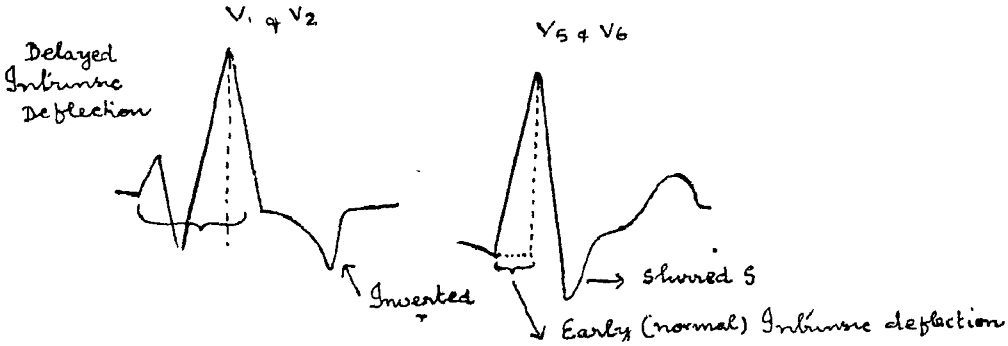


Similarly in *Rt. Ventricular hypertrophy* V_1 and V_2 will show :



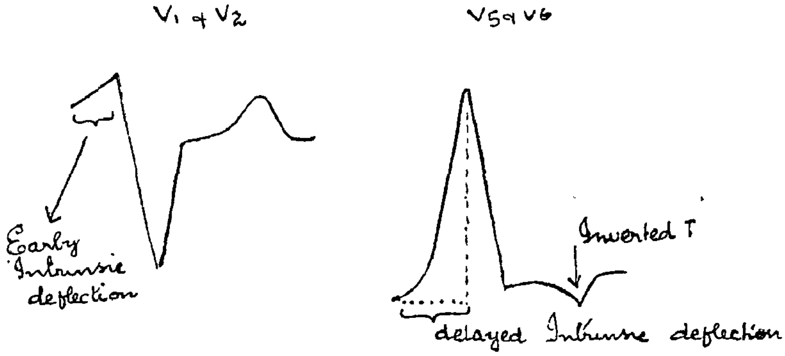
Bundle branch block.—When bundle branch block is present, the contralateral ventricle gets stimulated first and the early part of the deflections obtained on that side is nearly normal, though later they be deformed by the delayed excitation of the ipsilateral ventricle. Where as

on the affected side the curves are distorted. The R is slurred and delayed, because of the delay in the intrinsic deflection. Thus in Rt. bundle branch block,



This pattern is some times called *r* S R[1] pattern,

In left bundle branch block,

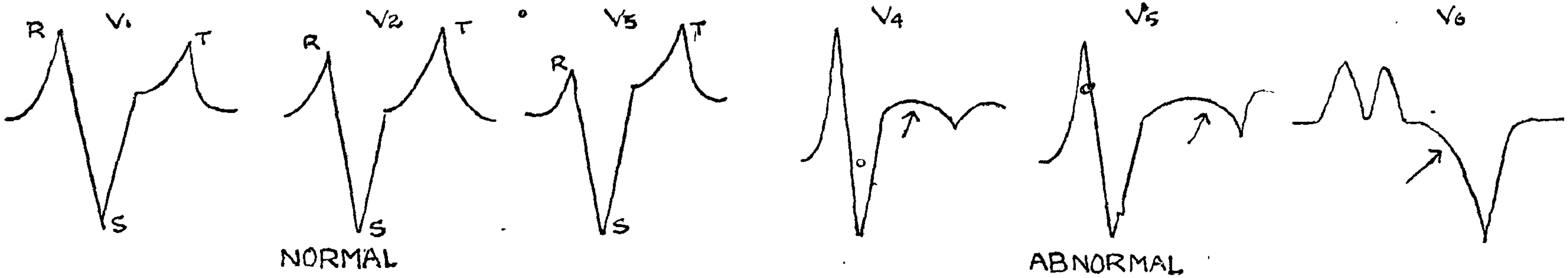


more than 0.04 second.

Myocardial Infarction.—The E. C. G. changes in precordial leads will be confined to cases of infarction of the anterior surface and the particular leads affected would depend on the exact location of the infarct. Thus extension infarction will show changes in all the six precordial leads, whereas anteroseptal infarct will involve only V_3 and V_4. The antero-lateral infarct will be shown in V_5 and V_6. High lateral infarction may be seen only in AVL lead. The posterior infarction is visible only in AVF lead. These may be illustrates as follows:—

MYOCARDIAL INFARCTION

1. ANTERO-LATERAL INFARCTION



V_1, V_2, V_3 are normal. Changes are seen in V_4, V_5 and V_6.

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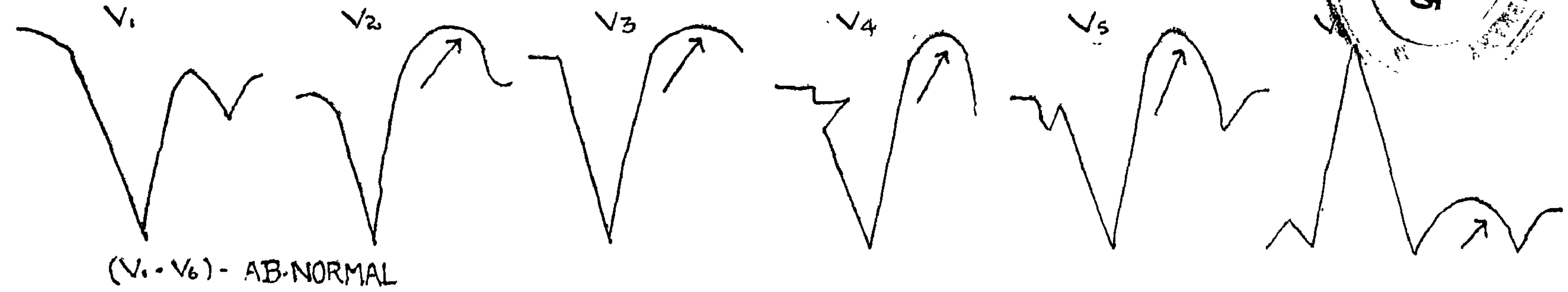
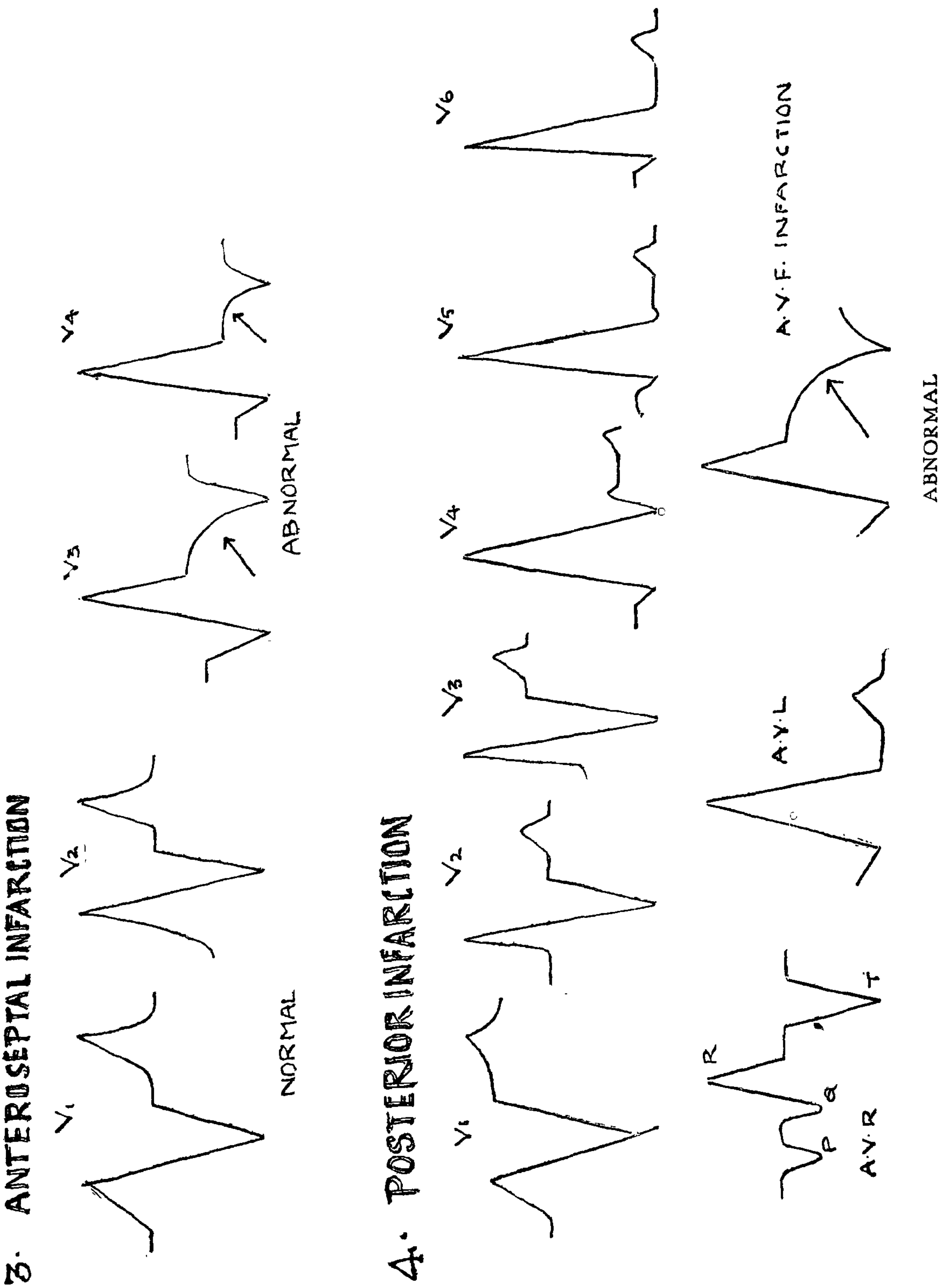
2. EXTENSIVE ANTERIOR INFARCTION



All show prominent Q waves with ST elevation.



3. ANTEROSEPTAL INFARCTION
V1
V2
NORMAL
V3
V4
ABNORMAL
4. POSTERIOR INFARCTION
V1
V2
V3
V4
V5
V6
R
P
Q
T
A.V.R
A.V.L
A.V.F. INFARCTION
ABNORMAL

In posterior infarction all the leads except AVF are normal. AVF shows a wide Q, and an upward shift of ST segment with an inverted T.

SUMMARY

1. The unipolar leads show the actual potentials, where as bipolar leads show potential differences.

2. Changes in position, Ventricular hypertrophy, conduction systems, and myocardial infarctions can be minutely studied by unipolar leads.

REFERENCES.

1. Bain, C. and East, T., 1948. Recent advances in Cardiology, pp. 416—417.
2. Goldberger, E. 1953, unipolar lead electrocardiography and Vector Cardiography, pp. 32—211.
3. Hill, I. G. W. 1950, Lancet, Vol. 258, pp. 985—991 & pp. 1027—1034.

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Hydatid Cyst of the Kidney

G. ATMARAMA RAO, M.S.

THE small adult taenia echinococcus in the dog's bowel causes but little harm. Its larval cysts in the human host often assume huge dimensions and may be the cause of serious trouble. These cysts settle down in any organ of the body and thus account for the varied and puzzling clinical manifestations of hydatid disease. The larval cysts are often mistakenly diagnosed as tumour of the particular organ. Hydatid cysts have been recorded in every organ of the body. Brailsford had given the following percentage incidence of somatic infestation of larvae of echinococcus (Table I).

Table I.

Incidence of somatic echinococcal infection.

Organ		Liver	Lungs	Muscle	Brain	Spleen	Kidney	Bone
% Incidence	...	70	10	5	4	2.5	2.5	1

Hydatid cysts of the kidney are not common and form only 2 to 4% of somatic echinococcal disease. Only 16 hydatid cysts of the kidney have been recorded at the Royal Prince Alfred Hospital for over 50 years. The 10 cases of hydatid cysts reported by Anderson (1945) from Western India show no record of renal hydatid cyst. Das (1951) recently reported one case of renal hydatid cyst and he is of opinion that hydatid cysts of the kidney are rare in India. The case reported below is the first one I have met with in my surgical practice although one of my surgical colleagues has subsequently operated on a similar case.

Nearly 25% of persons with renal hydatid cysts present no symptoms and remain so all through their life. These may be grouped as clinically "occult". Some may seek medical aid for a slow growing painless mass in the loin with no acute discomfort. These are often wrongly diagnosed as renal tumour or hydronephrosis. The larval cyst may obstruct the renal arteries and thus may answer for a small percentage of those cases presenting signs and symptoms of hypertension. Alarming symptoms of severe pain, vomiting and collapse may be manifested by the patient in case the hydatid cyst ruptures into the renal pelvis. In these cases the urine is often turbid and blood tinged and it may be possible to demonstrate scolices in the urinary sediment. Such a termination of renal hydatid cyst was reported by Bockal in 6 out of 29 cases. An occasional case of peritonitis, result of rupture of hydatid cyst of kidney, has been reported. A person with hydatid cyst of the kidney may, on rare occasions, present severe symptoms of toxic absorption of hydatid fluid *i.e.* high temperature, urticaria and convulsions.

In the majority of cases patients with renal echinococciasis are in perfect health and belong to the age group 30—40 years. It takes from 5—10 years for a recognisable clinical picture to develop after the larvae had established its residence in the human body.

A certain preoperative diagnosis of renal hydatid cyst of the kidney is not possible unless the possibility is borne in mind. Calcified spots seen round about the lower pole of the kidney in a plain skiagram is suggestive of hydatid cyst of the kidney. In all suspected cases hydatid thrill, eosinophilia, a positive intradermal and precipitin tests afford confirmatory evidence. Pyelography does not distinguish hydatid cyst from other cysts of the kidney but is of value in indicating the relative position of the cyst to the kidney. The temptation for a diagnostic puncture or aspiration has to be resisted for fear of dissemination and the profound shock which may supervene.

Operative removal is the treatment of choice in all renal echinococcal disease. Resection is practised when the cysts are small and located at either pole or over the convex border. NiCaise reported 3 deaths in 14 resections. Total or partial nephrectomy is advocated in cases where the cysts have ruptured into the renal pelvis and the kidney has been totally or partially destroyed. Similar treatment is carried out when the cyst is located in the hilum of the kidney. NiCaise recorded 14% mortality in 42 nephrectomies.

CASE REPORT

A Hindu female named R. G. aged 35 was admitted into my wards on 29—6—49 for a gradually enlarging lump in the right loin, of 20 years' duration. It was small when first noticed 20 years ago. Previous history was noncontributory. She complained of vague pain and fullness in the right loin.

Physical findings.—A smooth lump, below the right subcostal margin extending to the median line and 1″ above the right iliac crest below, was palpable. It moved with respiration and was dull on percussion. Examinations per vaginum and rectum were noncontributory.

Investigations.—Haemoglobin 50%. Differential leucocyte count revealed eosinophils 7%. Blood pressure 100/70 m.m. Intravenous pyelography: "Plain x-ray (Fig. 1) revealed an oval calcified shadow of 5″×4″ in the region of the right kidney. In the pyelogram, pelvis of this kidney was markedly distended with the dilated calyces. The left renal pelvis and calyces were normal" (Fig. 2).

Preoperative diagnosis.—" Cyst of the lower pole of kidney '.

Under general anaesthesia through an oblique lumbar incision—one commonly used to approach the kidney, a large retroperitoneal cyst densely adherent to the lower pole of the right kidney was felt and exposed. Total nephrectomy was performed as the cyst could not be resected without damaging the kidney. The wound was closed in layers. She had an uneventful recovery.

Morbid Anatomy.—A large, thick walled cyst embedded in the lower pole of the kidney. It had compressed the renal pelvis. Sectioned surface (Fig. 3) showed a number of glistening white daughter cysts which were reported to contain scolices by the Professor of Pathology.

Post-operative diagnosis.—" Hydatid Cyst of Kidney ".

SUMMARY

1. The literature on hydatid cyst of the kidneys is reviewed and the rarity of condition emphasised.

2. Preoperative diagnosis of cyst of the lower pole of kidney was possible, but the hydatid nature of it was revealed only at operation.

3. Though resection is the method of choice in hydatid cyst located at the pole or over the convex border of the kidney, one must be prepared to carry out a nephrectomy if conditions demand it on account of dense adhesions etc. It is necessary to assess the functional efficiency of each kidney preoperatively in all these cases so as to see if there is any functioning renal tissue worth preserving.

ACKNOWLEDGEMENTS

I am grateful to Dr. M. V. Ramanamurthy, M.B., B.S., F.R.C.S. (Edin.), for according permission to publish the case report. My thanks are due to Dr. G. Viswanathan, M.D,, Professor of Pathology for the biopsy report and Dr. D. Jaganatha Reddi, M.D., Professor of Forensic Medicine for his valuable advice and help rendered.

REFERENCES.

1. Anderson, D. A.: Indian M. Gaz. 80 : 373-377, 1945.
2. Das, N.: Ind. J. Surg. 13 : 85-87, 1951.
3. A text book of surgery—by American Authors. Edited by Fredarick Christopher—5th Edition (1949).
4. Surgical Pathology—By William Boyd—6th Edition (1947).
5. A Guide to human parasitology etc.—by D. B. Blacklock and T. Southwell—2nd Edition—1935.
6. Pathology of Tropical Diseases—An Atlas—J. E. Ash and S. Spitz—1945.
7. The Principles and Practice of Tropical Medicine by L. Everard Napier—1946
8. Stitt's Diagnosis, Prevention and Treatment of Tropical Diseases—Strong—7th Edition—1945.

Dr. S. Rangachariar

ON THE OCCASION OF THE UNVEILING OF HIS STATUE.

1. *Revered, beloved! Thou art but gone before us,*
To the Celestial Sphere whence thou didst come,
The great Physician said, " Friend, Come up higher,"
And thou didst leave us for thy Heavenly home.

2. *As when the poor man cried, the helpless pleaded,*
And thou didst haste as at the call of God,
In thy distress His Hand was stretched to save thee,
It raised thee up forever from the sod.

3. *Thy kind hand never more will wield the Scalpel,*
Thy heart no more will bleed for human pain,
No more on earth thou'lt fight the anguished battle,
Nor will thy presence comfort bring again.

4. *But still thy labours' Scene thou contemplatest,*
In spirit still thou standest at thy post,
And still the tide of frailty floweth round thee,
And health for sickness craves the faltering host.

5. *And on the earnest student as he passes,*
And gazes up and longs to live like thee,
Shed thy blest mantle, that a double portion,
Of thy great spirit move him mightily.

6. *And so thy silent tongue shall speak for ever,*
The word of courage to the fainting soul,
Thy burning zeal through each fresh channel carry,
Healing and life and hope—the Doctor's goal.

—L. V. W.

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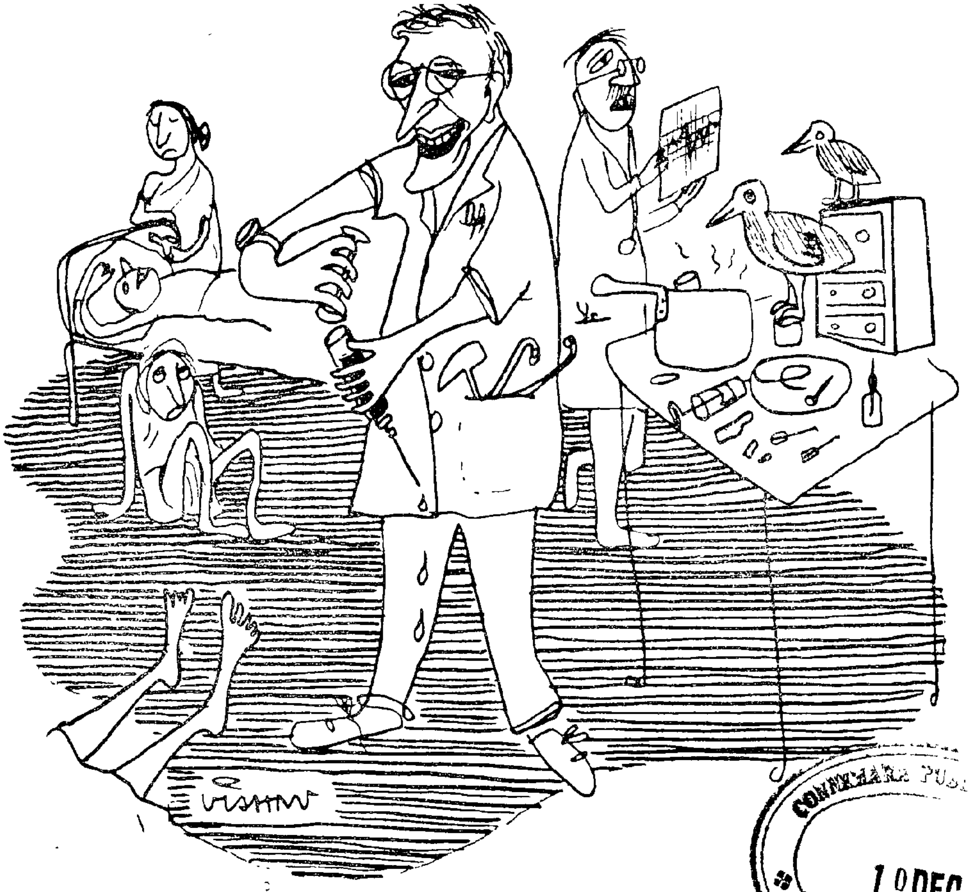

"I am sure this syringe cannot belong to this ward. It works."

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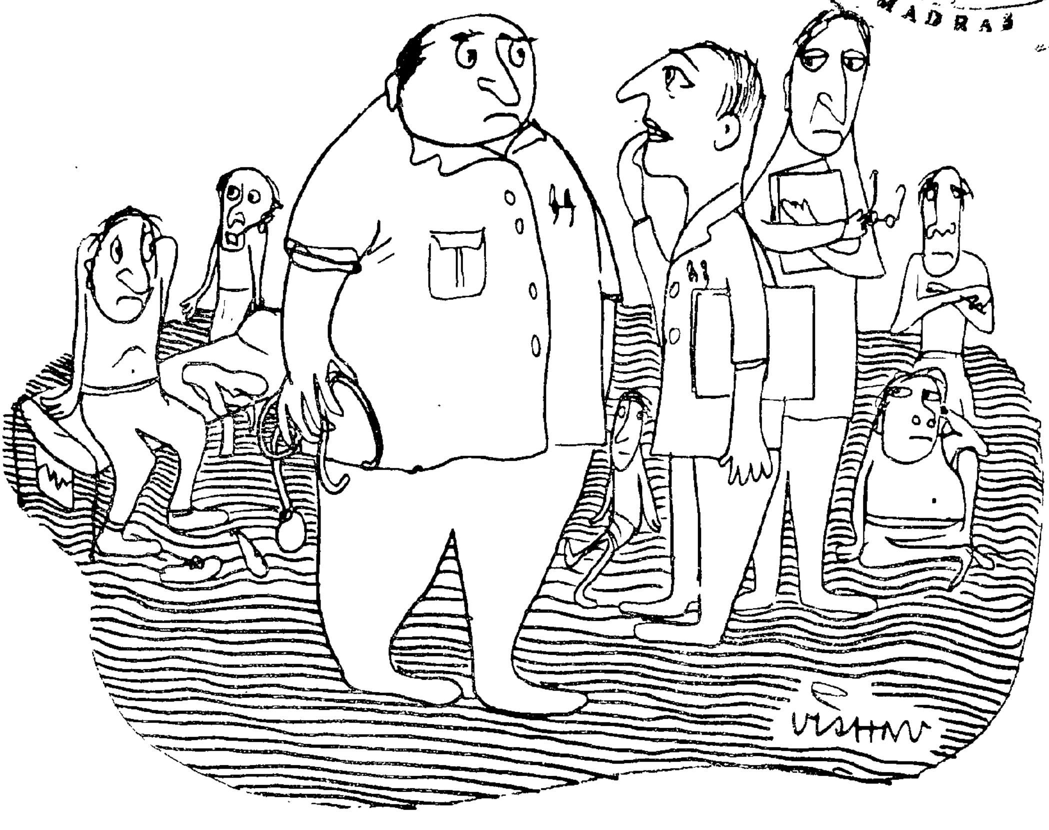

"The person whom you have just examined is not the malnutrition case, Sir. He is your own House Physician."

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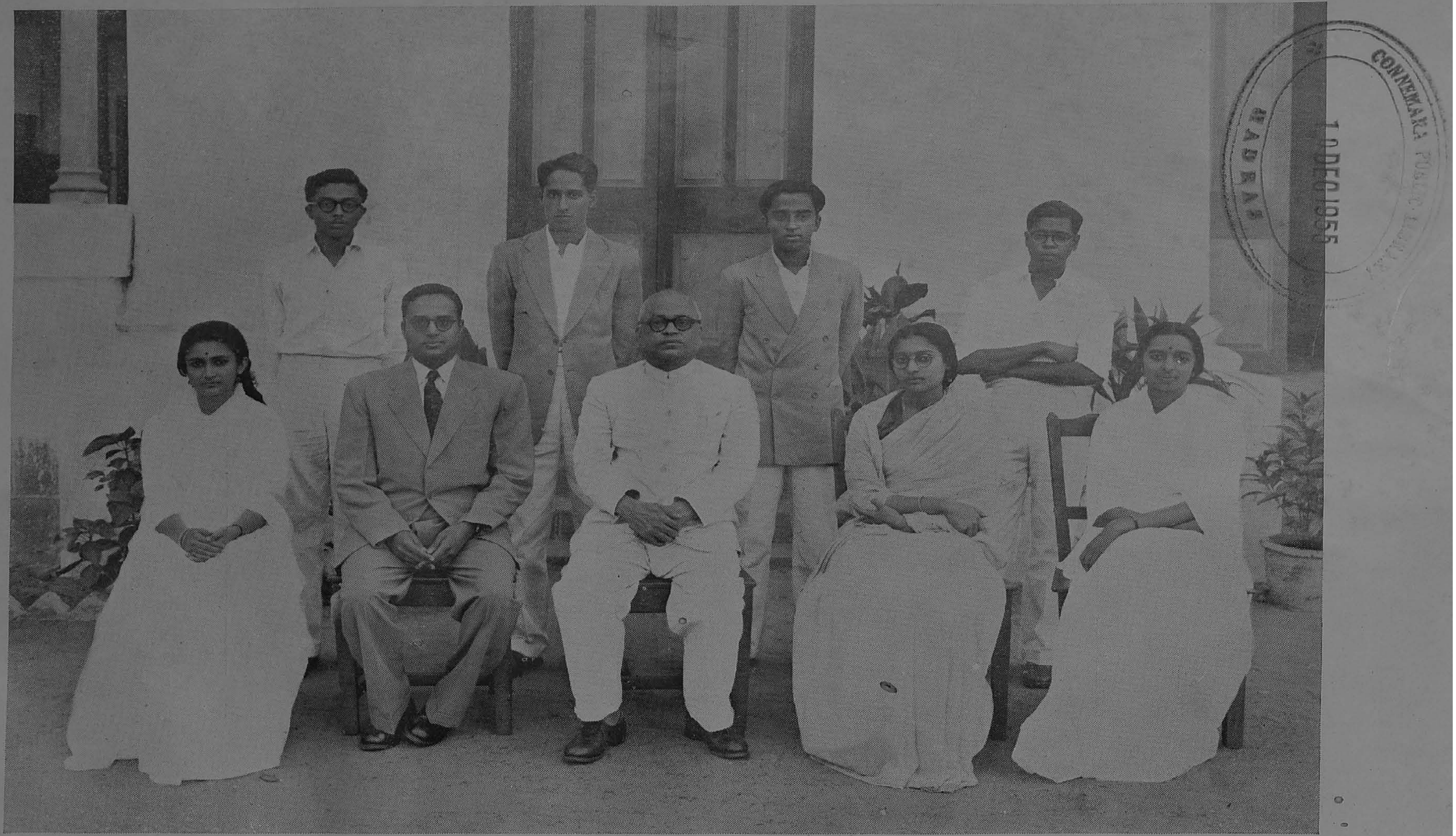
Dr. ATHMARAMA RAO, M.S.

STUDENT'S CLINICAL SOCIETY 1953—'54.



Standing:—V. Ramachandran (3rd year), N. Lakshmipathi (5th year), R. Narayanan (4th year), Sivaramasubramaniam (5th year).

Sitting:—Miss Minnie Ponnappa (4th year), Dr. B. Ramamurthi (President), Dr. C. K. Prasada Rao (Ex-Officio President), Miss Narayani (Secretary), Dr. K. Anusuya, M.B.B.S.

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Case Reports

I. A case of renal rickets by Sivaramakrishna Prasad, IV Year.

A BOY aged 15 years came with the complaint of knock knee and pain in both knee joints of 6 months duration. He had bilateral gynecomastia. He gave a history of fever with cough and cold about 1½ years ago which lasted for about a month. On examination the following features were noticed: Pigeon Chest, Bent lower extremities. Genuvalgum + A tendency for flat foot. Hard bony swellings over both the wrists and ankles. Bilateral poly dactylism + both testes present in the Scrotum-small in size, Penis—under developed. Pubic hair scanty in distribution.

B.P. 120/80 C.N.S., C.V.S. and R.S.—N.A.D.

Liver palpable 3 fingers below costal margin. Soft and not tender.

Spleen not palpable.

Urine—no alb. no sugar, sp. gr. 1010.

Urine ca 3.6 mg.%.

Urine phosphate 133 mg.%.

Total ca content in 24 hours urine 30 mg.

Blood—Total W.B.C. 9400/cmm. P_{62} L_{34} E_3 M_1

Blood—Proteins	7.6 G.%	Serum ca 6.1 mg.%
Albumin	3.6 G.%	,, Phosphates 12 mg.%
Globulin	4.0 G.%	

Blood urea 135 mg.%

Urea clearance test—	Minute volume	1.2 cc.
	Urine urea	491.4 mg.%
	Blood urea	105.0 mg.%
	Standard clearence	9.523%

X-ray skull shows hyperostosis of the skull except at the base.

II. A case of Pancoast Syndrome by T. P. Vaidyanathan, V year.

A male patient aged 46 years came with the following complaints:

1. Shooting pain in the left upper limb—4 months.
2. Absence of sweating in the left half of the face—3½ months.
3. Drooping of the left upper eyelid—3½ months.
4. Painful swelling over the left lower part of the neck—3½ months.
5. Weakness and thinning of the left forearm and hand—3½ months.

He gives history of dysentery 15 years ago. He is a smoker.

Salient features.—Marked clubbing of the fingers

Inguinal glands are palpable on both sides—discrete, firm and not attached.

Lt. axillary glands are palpable, discrete, firm not attached tenderness +++

Rt. axillary glands are palpable, not tender.

Scoliosis present. No tenderness of the spine.

Left pupil smaller than the right Reaction to light— +

C.V.S.; R.S. normal Accommodation — +

Radial pulse on the left side very feeble. B.P. < L.A. 100/80, R.A. 110/70

Wasting of chest wall on the right side +

A diffuse swelling over the supra clavicular region extending to the back. Not pulsatile, skin over the swelling is stretched, no distended veins seen. Swelling appears smooth. The swelling is soft, tender, not warm, surface smooth but for the nodularity present due to the enlargement of a few glands over it. The glands are firm and not attached. No pitting on pressure. No fluctuation, Not reducible.

In the left upper limb, muscles of the thenar and hypothenar eminences and the muscles of the forearm are markedly wasted. Radial pulse feebly felt, compared to the opposite side, on lowering the limb but on raising it is normal.

Motor functions of median and ulnar nerves—impaired.
Radial —not impaired.

Sensory functions of median and Radial—not impaired.
Ulnar—Touch and pain impaired on palmar and dorsal aspect of medial 1½ fingers.

X-ray—Dense opacity-apex left lung.
No cervical rib.
Erosion of 2nd rib.

Bronchoscopic examination—no evidence of any growth.

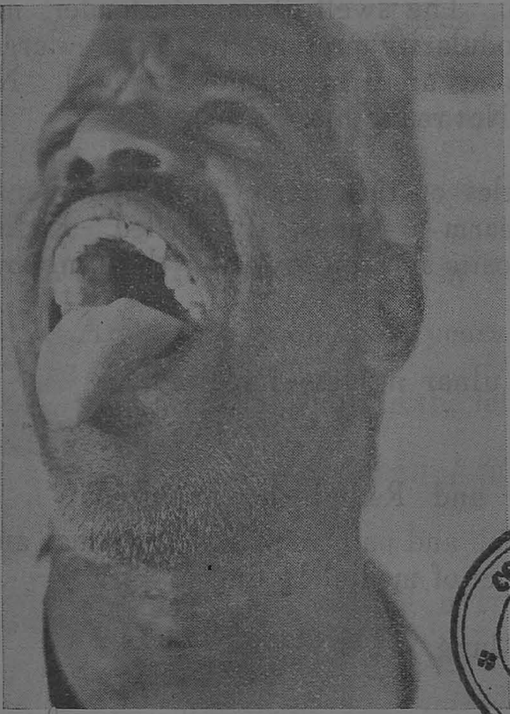
III. Cysticercosis by T. M. Nachinarkinian.

The patient, an adult male of 40 years complained of nodular swellings all over the body for 6 months and fits of 5 months duration. He has a number of painless nodular swellings all over the body. The fits which are generalised are preceded by headache, vomiting, dimness of vision and giddiness. Headache and giddiness are present for 3 days after the seizure. On enquiring into the past history we learnt that he suffered from dysentery 8 years ago and gives history of passing worms 2 months ago for which he had treatment. Pt. is a non vegetarian who used to eat all kinds of meat.

The pt. has multiple nodular swellings all over the body. They are not pulsating, no pressure effects or any color change of the skin.

There is no local rise of temperature or tenderness. They are firm, not attached to the skin or underlying tissue and not reducible. Lymph glands not palpable.

CYSTICERCOSIS.



Cyst of Tongue.

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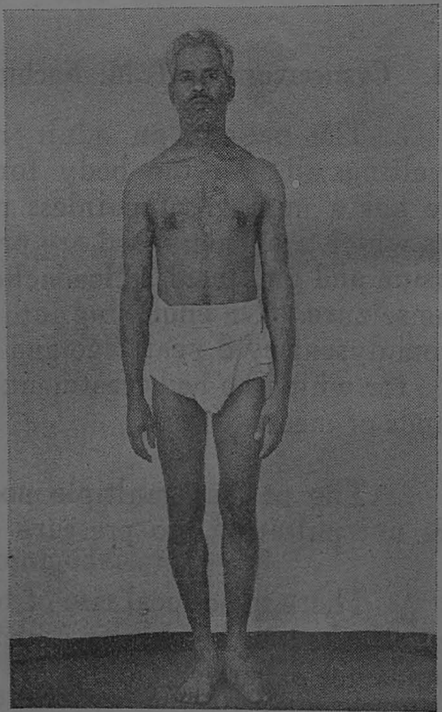
Cysticercosis showing multiple nodular swellings.



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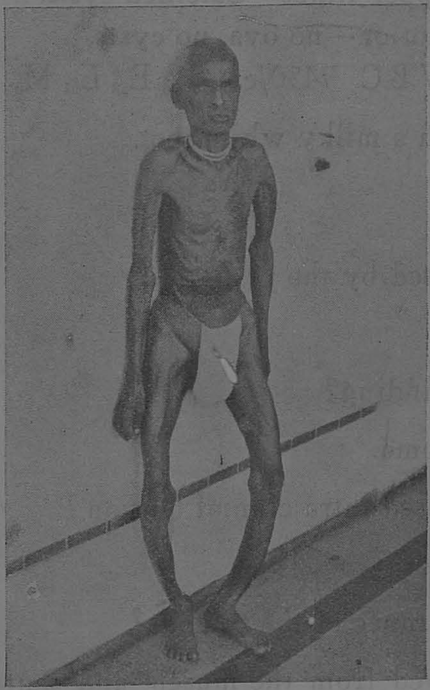
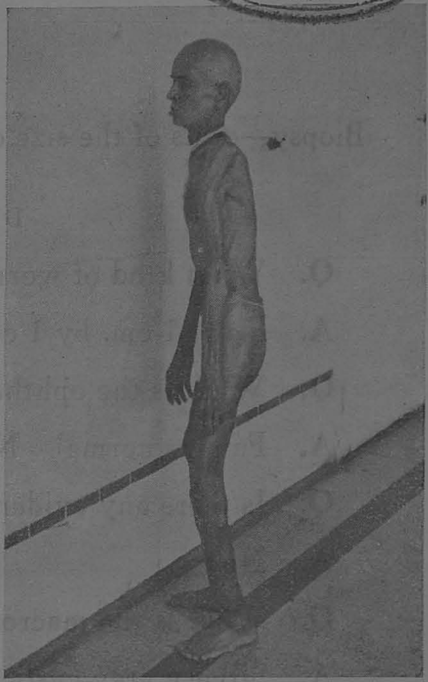
PAGETS DISEASE.

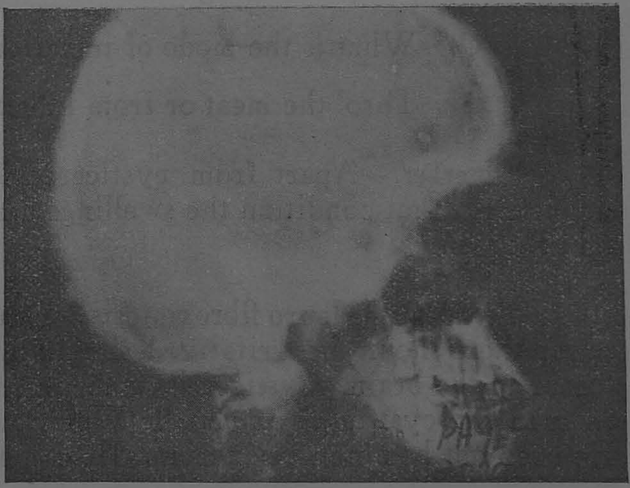


General appearance.



General appearance.

Areas of rarefaction ond osteosclerosis.



Enlargement of the diameters of the skull.

The salient results of investigations are: X-ray skull and
Upper limbs—Calcified cysts.
Motion—no ova, no cysts.
W.B.C. 7450/cm. P_{56} E_{23} L_{21} M_0.

Biopsy—cysts of the size of a pea with a milky white spot.

DISCUSSION

Q. What kind of worms were passed by the pt.?

A. Flat. 1 cm. by 1 cm.

Q. What is the ophthalmoscopic finding?

A. Fundus normal. No papilloedema.

Q. Is there any evidence of increased intra cranial tension?

A. No.

Q. What is the macroscopic appearance of the tumour?

A. Silvery grey cystic mass removed from the muscle and sent for microscopic examination.

Suggestion: From the history, symptoms and signs we could think of cysticercosis of the brain.

Q. Can we localise the fits and remove it surgically? What is the role of antimony tartrate and hetrazon?

A. They are being tried.

Q. What is the mode of infection?

A. Thro' the meat or from infected vegetables.

Observer.—Apart from cysticercosis we could thing of Trichinellosis. In that condition the swellings are smaller and treatment will not be effective.

President.—Neuro fibromatosis does not cause fits. For epileptic fits to occur there should be irritative lesion in the brain. Neuro fibroma does not occur in the brain. Cysticercus is the intermediary stage in tenia. Worm in man and cyst in pig is usual. When man eats eggs he gets cysticercus. He need not be a non vegetarian. He can eat them with vegetables. They

cause tissue reaction and they get killed and get fibrosed. In the brain, a dying cysticercus causes symptoms. In any case we should localise the site. Loss of consciousness occurs first. So it should be in the diencephalon. Cysticercosis of the brain is common.

As time advances the cysts are killed. Till then we should save the patient.

IV. A case of pagets disease by Miss B. C. Kuntala.

Mr S aged about 60 years complained of headache, giddiness and fainting of 4 years duration, deafness for 1 year, swelling of feet for $1\frac{1}{2}$ months and inability to articulate properly for 15 days. 2 years ago, in one of his fainting attacks he fell down and fractured his rt. humerus and left radius.

C.V.S. occasionally the sounds are alternately strong and week. There is an alternating slow pulse in confirmity with it. B.P. 170/110 arterial walls thickened.

Skeletal system.—Head appears too large for the size of the trunk and extremities. Skull bones are thick and irregular especially over parietal eminence. Long bones of all four limbs are curved forwards and out wards irregularly and there appears to be sub periosteal bony deposits giving rise to irregular thickening in several places. Pelvis is widened. Joints are free except for mild osteoarthritis in the large joints.

Serum alk. Phosphatase	12 units.
Serum acid Phosphatase	5 units.
Serum Ca.	10 mgms.
Serum P.	3.4 mgms.

X-ray skull and long bones—show areas of rarefaction and osteosclerosis. Enlargement of the diametres of the skull.

Q. What is the height of the pt. before and after the disease?

A. The pt. says that the height is diminished.

Suggestion: This could be a case of pagets disease. Deformities, nerve deafness and clinical picture are characteristic. Hypertension could be explained as follows: Arteriosclerosis is often marked in Pagets. There is

increased circulation in the newly formed bones leading to hyperdynamic activity of the heart. Hypertension accompanies it.

Q. Rationale. of Thyroid and U. V. ray therapy in this condition?

A. Not proved.

President.—Change in size and shape of the bone are characteristic. At a certain stage calcium is removed from the bone by osteoclasts when osteo clastic activity is increased. Alkaline phosphatase is increased. It indicates that the bone is being absorbed. In pagets where there is bone laid, alk. phosphatase is not increased.

Making a hole in the bone and removal of medulla has been tried but I don't think that it will reduce pain.

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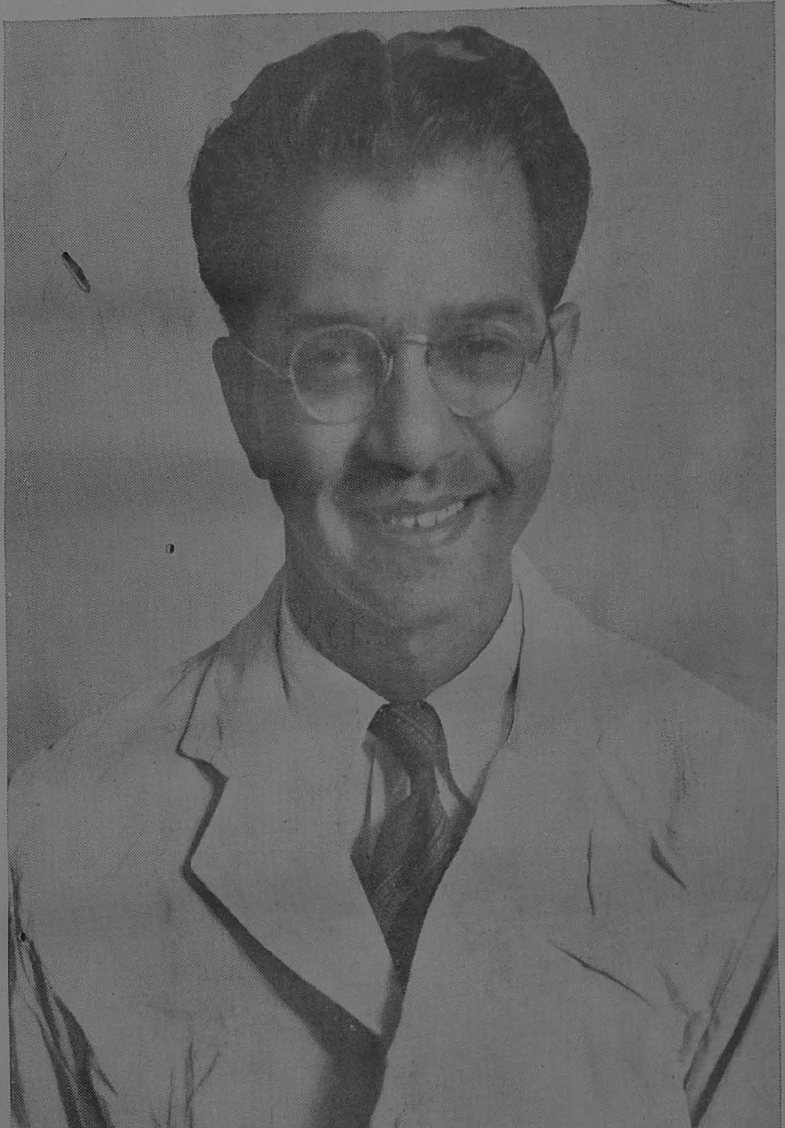

Dr. M. G. PRABHU, M.D.

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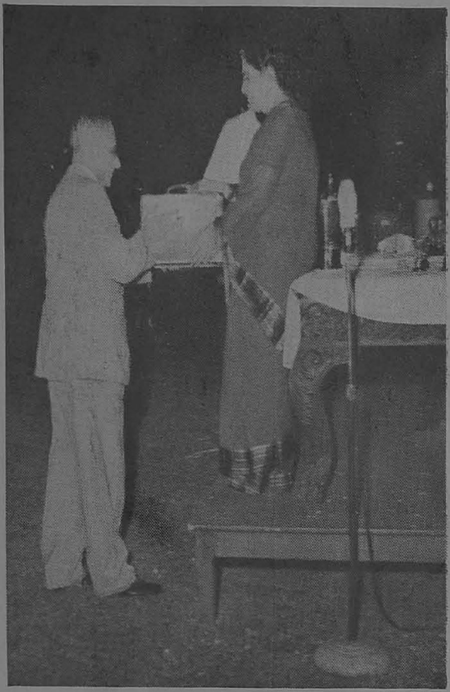

No surprise for the Malabar couple!

They talked about body and soul.

SPORTS-DAY

Old folks at home.

Something was there for few of us.

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The Almamater Pleads

Dr. M M. COOPER, M.B., B.S.

STOP—friend........please.

........but a moment and my plea shall be over—a twinkle and I shall have gone leaving in my wake a lingering fragrance for you to cherish. Bewildered yet awakened, the Fragrance you shall follow enchantedly till some day you shall reach the source from whence She came.

Who is She? Ah............but tis too soon to reveal............patience yet and the answer will be yours.

I call her *Kala the beautiful, who about a century ago in her infancy came to reside within my precincts. Lovely at birth, sweet in her childhood and charming in her youth, she held her sway over the multitudes who entered and passed through my portals of learning. She guided their thoughts, imaginations and natures sublime. She moulded them into a pattern befitting true sons and daughters of the soil. She inspired the sculptor and the bard alike, and this fair name and fame of mine shone fairer throughout the country.

But alas! She lives here no more.

Kala! where art thou? Why are you exiled from the domains of your childhood and youth—leaving me like an arid desert—fruitless and dry? Does no one sing your praise at all?—nor revel in your beauty and charms? Do the enthralling strains of your sweet voice and the rythmic jingle of your dancing feet resound no more? Are the indelible images of thy swirling form rapt in ecstatic dance at last erased from the minds of all!!........a pity.

---

*Kala The muse for arts.

What shadow is this, that I find creeping in your place—dark and insidious. How come that the Demon gloats over his sensual triumphs over the multitudes of today? The stench of his unbridled passion, mingles with the air of dissipation and folly and while a few fall a prey to his mischiefs and glitter, the majority remain dumb and bewildered—wilted and at a loss without thee: Oh Kala if only you could be here now!

...........thanks friend........that is all........that is my lament.........

............have you by any chance seen Kala anywhere? Could you, who possess a lofty mind, a pure heart, and a burning ambition to achieve the best—could you not, by the sincerity of your purpose muster up enough strength to restore Her to her proper place?

Then will She—the presiding Diety of the Fine Arts—of divine music and poetry serene, of enlightening drama and stirring oratory, of celestial dances and inspiring paintings, of life like sculpture and thought provoking literature—then alone, will She join us—you and me—lending a new charm and a fresh joy to one and all, in every pursuit of our lives.

This plea—this the Fragrance—may it ever abide topmost in your mind and ere I depart........my blessings to thee........friend........adieu.

———★———

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In Our Bath Rooms

ANONYMOUS.

YOU take your bath, the first thing in the morning, to begin a perfect day. You are most welcome to the bath room, in the earlier part of the morning. When you get into the room and touch the tap, you realise that you are shying at the cold water. In your worry, you may or may not invoke the Ganga and the Jamuna. But there will be a prayer to your deities, to help overcome the awkward initial start?

Once you have entered, you are completely at the mercy of the tap; at any moment it may begin its play. It can keep you stunned for hours together by withholding the supply. You may get anything, from dribble to torrent. Whether there is supply or no supply it is purely a matter of chance. When there is no supply, there is much danger awaiting you. The tap is trying to chagrin you. As the flow ceases you may hear the hissing current of air. Simultaneously you will be going breathless. It is obvious that a vacuum is being created by suction and for want of air, you are becoming restless. As you wait for the flow, you may observe water profusely trickling through the loose tap. The leakage is sufficient for a sponge bath, but insufficient to take a shower bath. At this sight your sense of anger is likely to mount up. With dogged patience you wait, worrying all the while about the waste of your precious time. If only you had brought your pathology volume, you could have finished a chapter. Indeed every one of you think of carrying a book when you go to the bath room. But none of you had dared to carry one so far. Who is to break the ice? When you are dallying in such reflections, you will be taken forward by start, by the sudden fall of water and your hands will grope to reduce the flow. This process may be repeated many times during a bath.

You cannot blame the vagary of the tap. It is not playing mischief by itself. Yet it appears to be so, because it is subjected to the pressure elsewhere.

In some other tap you can have a different adventure. By a mere touch you will have allowed water to pour down. You will understand, presently that you have opened the tap, once for ever and it is a practical impossibility to stop it. It will threaten to remain opened, until it has drained the whole reservoir. You will have to undertake a Herculean task to stop that. The waste of your time and energy to close it is terrible.

The tap in some other room will be very tight to open. When you have manipulated it to open, it will appear to you that you have come to a wrong place and have pressed on a wrong switch. It will make you for a while to feel, that you have set an engine into motion to produce the sound—di di di di di di di. Yet it will be musical to listen to it as you wash.

Sometime back, one evening, one of our friends was hurrying to a bath. Darkness had almost set in. He was making a beeline without regarding his neighbours on his way. The room was quite dry. He closed himself inside and was about to have a comfortable bath. As he turned the tap, he felt some unusual sensation in his right upper extremity. He had not even time to withdraw ; the room became wet and he felt a thrill from his top to toe. Before he fell down unconscious he realised that he was about to die under the tap. It dawned on him and later to all the members of the hostel, that not only water but electricity also was on the tap in that bath room.

The bathroom not merely purifies us, but cools our body and mind as well. It is the place wherein our finer faculties blossom into perfection. It inspires us to sing and perhaps our music is best manifest only in the bath room. As we proceed to the bath room we tune up our favourite song and when we are within, the music is at its full pitch. Some of us may be distinguished musicians and may be renowned for our accomplishments in this art. Let us remember that only in the bath room we have developed this art into perfection.

We like bathing in our bath rooms as many times in a day as time may permit us. We have braved even the cold January mornings and have been regularly attending them. The bath room is capable of enriching our mind with numerous novel ideas. The rock and the river

took Wordsworth to the heights of Poetry. The bath room has been to us, what Nature had been to Wordsworth. In it, we find that creative power which had been responsible for the wake of "The Vicar of Wakefield"*, and "The Story of San Michale" †.

A two fold benefit we derive from our bath rooms; the experience of pleasure and a stimulus for the most original, most sublime thoughts. The pleasure, as it allows water to flow over our body, and the stimulus for thought when there is no flow. With our faces radiating joy and eyes emitting sparkles, we leave the room after the sacred bath. The earlier we bathe, the livlier the rest of the day, we make.

Where the mind is without fear and the head is held high;

Where knowledge is free;

Where the world has not been broken into fragments by narrow domestic walls;

Where words come out from the depth of truth;

Where tireless striving stretches its arms towards perfection;

Where the clear stream of reason has not lost its way into the dreary desert sand of dead habit;

Where the mind is led forward by thee into ever widening thought and action;

Into that heaven of freedom, my Father, let my Country awake.

—*XXXV, Gitanjali by Tagore.*

*Written by Oliver Goldsmith (1728—74).

†Written by Dr. Axel Munthe (1859—1950) (A Swedish Physician).

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The Pathology of Dress

G. V. SUDHEENDRA.

THE condition of ones apparel has a certain effect upon the health of both body and mind of the particular individual. The popular saying "Clothes make the man" has its origin in a general recognition of the powerful influence of the clothes upon the wearer. This is well illustrated in everyday life around us. We remark the bold carriage (high steppage gait) and mental vigour of a man attired in a new suit of cloths; on the other hand we note the melancholy features of him who is conscious of a posterior patch, or the haunted face of a sufferer from an internal loss of buttons. The fact haunts the oppressed who may show symptoms ranging from nothing to something more than that. Ofcourse excluded are those who deem it an encumbrance on their sedate existence to dress and do so only to such an extent as will require their minimum exertion. These people have an extreme apathy to the suffering they infuse to their sorroundings. This part of humanity dress very little or none at all. Life being so short and very insecure, they argue, why bother yourself unnecessarily how a shirt should be worn or a trouser ought to be buttoned. It is beyond our limited means to cure such advanced and self-inflicted maladies. We shall reserve such of our limited power to analyse and correct the more common occurrence of such conditions. It is therefore imperative that a valuable addition be made to the science of healing in this field. The numerous diseases which are caused by this too prominent fatal influence should recieve a scientific analysis and their treatment be included in the principles of the Divine Art of Healing.

The pathological states of the clothes may be divided into Medical and Surgical cases; with subdivisions according to the particular garment through which the sufferer is attacked.

MEDICAL CASES

Probably no article of apparel is so liable to a diseased condition as the Trouser. It may be well, therefore, to treat first those cases to which they are subjected.

Contractio Pantalunae—(or Shortening of the leg of the Trouser)—An extremely painful malady occuring in the growing youth. Signal symptom is the appearance of a yawning gap (Lacunae) above the shoes accompanied by an acute sense of humiliation and a morbid sense of being jested. Quite a mild stimulus applied to any point on the surface of the sufferer "due to irradiation within the cord" produces a widespread effect which includes involuntary twitchings of the muscles and other adventitious movements.

The remedy suggested is the use of boots reaching up to the knee or socks dyed to match the receeding trousers; to be removed only within the safe sanctuary of ones own room. Confiding even to the thickest chum (whatever his thickness be) is very un-advisable. Such a procedure with the friendly wall or with chums short of hearing may help to relieve the mental congestion. Pathological conditions closely allied to the above are:

Inflatio Genu—(or Bagging of the knees of the Trousers) where the symptoms are similar to those seen above. The patient shows extreme aversion to the standing posture. In acute conditions, if the patient has no other resource than to stand, the tone of the neck muscles is decreased so that the head falls to the fully flexed position and is held there. The eyes display jerky movements consisting of an outward deviation (to observe the sorroundings) followed by a return to the "rest point"—a fixation of painful rigidity upon the projecting angle formed at the knees of the trousers.

(In both the above cases, a Tonic to relieve the nervous tension should be given at the earliest opportunity and relieve him from that morbid sense of his infirmity. That will do much good and improve the general and systemic tone.)

Oasis Prominentia or Patches.—These rashes are liable to break out anywhere on the trousers. They range in variety and the degree of gravity from the one of a trifling character to the one of a fatal nature. No part of the Trouser seems to be more allergic to this malady than the seat of the trousers. The most distressing cases are those where the rash assumes a different colour from that of the sorroundings.

Xoloris Dissimilaris.—In this condition, the mental state of the patient is in a sadly wandering state, accompanied by spontaneous deviation of the eyes towards the site of the malady. The only remedy suggested is to join cheerful society with books and flowers, and above all, *by* a complete change at the earliest opportunity.

The SHIRT seems to be blessed of a comparatively healthy life but for a few not insignificant unhealthy signs. These are:—

(1) An involuntary shortening of the shirt in all dimensions and is ascribed to a general and corresponding outgrowth of the mass of tissue, bone and muscle underneath. This is followed by a general feeling of discomfort and pain with severe girdling sensation, especially in the region of the axilla. The severity of the symptoms depend on the state of advancement of the malady. (The patient is advised to reveal to himself the dire necessity of allowing that growing mass of tissue, bone and muscle, a more liberal and appropriate covering).

(2) And there is a malady known as *Progressive Degeneration of the Zonum Collarium.* The only remedy is—it would be superfluous to mention it to the young blood and the old as well.

(3) The front of the shirt may be affected by a malady popularly known as *Dropsum Sambarrum.* This is entirely due to the mental indifference of the patient. This is generally harmless (if not Technicolourful) and can be successfully treated by repeated fomentation with Benzene and T.N.T.

Oddum Soccorum.—(or oddness of the socks)—A thing in itself trifling, but of an alarming nature if met in combination with Contractio Pantalunae. A twist in the malady may appear in the form of curious gaps on the extent of the socks. These gaps often occur without the least warning. So that, cases are known where the patient, in a social gathering, is seized with a consciousness of the malady so suddenly, as to render medical assistance futile.

SURGICAL CASES

There are just a few but most typical cases of diseases of this sort.

1. **Explosio or Loss of Buttons.**—It is the most commonly occuring malady requiring immediate surgical treatment. It is the most embarassing of all maladies occuring without any warning. The severity of the case Explosio is more often than not, proportional to the out word pressure

of the underlying mass of tissue bone and muscle.—This is a very peculiar malady, in that it seems to have a particular affection to the more generously built of our humanity. Even in such people it is seen to be dormant, but is provoked to instantaneous activity by any condition that increases the intra-abdominal pressure violently like a bout of violent sneezing or an outburst of mirthful laughter. The malady consists of a series of minor fractures, possibly internal, which at first excite no alarm. A vague sense of alarm is felt immediately which often leads the patient to seek relief in the string habit—a habit if unduly indulged in, may assume the proportions of a ruling passion. The use of sealing wax while admirable, should never be allowed to get a permanent hold upon the system for fear of accidental scorching of the vital tissue mass underneath and the serious aftermath.

2. **Fractura Suspensoria.**—(or snapping of the Bracer we mean the *Bracer*). Is of quite uncommon occurrence in our field of existence. Which amounts to a general collapse of the system. This is said to be the most instantaneous of all reflex actions. The patient is siezed usually by a severe attack of Explosio in the upper region of his apparel. This is followed by a sudden sinking feeling and often, loss of consciousness. A sound constitution may rally from the shock, but a weaker system invariably collapses.

3. **Sectura Pantalunae.**—(or ripping of the trousers):—caused generally by sitting on warm bees-wax or leaning against a hook or any projecting sharp point. This is accompanied by a distressing suppuration of the shirt. The malady is rather mental than bodily, the mind being submerged in a keen sense of indignity and a feeling of unworthiness. The only treatment is immediate isolation (to the I.H.?) accompanied by a proper and careful suturing of the affected part.

As a fitting conclusion, it must be strongly stressed that at the first symptoms of the malady, the patient should have no hesitation to approach the healer of these habiliments (*A Professional Tailor*). Much yet remains to be done and the subject opens wide to the inquiring eye. It is earnestly believed that this brief outline may help to direct the attention of our medical men to what is in the unexplored field.

IN MEMORIAM

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P. GNANAPRAGASAM

Like a dew on the Mountain,
Like a bubble on the Fountain,
Like a foam in the River.

Mr. Gnanapragasam, you have gone for ever not to return, at the early age of 22, the prime of youth and the cream of Life.

P. GNANAPRAGASAM

A. SUBRAMANIAN, III YEAR.

With deep regret we have to receive the shocking news of the sudden death of Mr. P. Gnanapragasam due to Small pox on the morning of 9th March 1954.

Born in Sebasthiapuram (In Tinnevelly Dt.) in 1932, he did his high School studies in Sawrerpuram and Intermediate Course in St. Xavier's College, Palamcottah. Later as we know he entered into the Mad[illegible] Medical College and came upto III year.

To speak of his studies he read the subjects with his own interests rather than preparing from examination point of view. He exercised more attention to his studies during his short stay in III year attending wards not only at scheduled hours but also at his leisure hours. He showed special interest for Psychology and Philosophy and in his last days he started reading books like Raja Yoga and Karma Yoga.

He was never a book worm to be called so. He mixed his curricular activities with a good proportion of extra curricular activities. In games though he did not excel as star he was more than moderate. He represented III years in Volley Ball which got through in the finals.

As a man he possessed a good lot of self control and always allowed his conscience a predominant part in his activities. He stood as a strong link between men of diverging views and restored their human spirits when they showed signs of animal spirits.

Mr. Gnanapragasam broke through the obstacles and came upto the level of Medico from a village in the remote corner of the Country, but he shattered many of the hopes of his family.

Nature has plucked off the bud before it has extended the petals of service to humanity leaving a deep scar in our minds.

MAY HIS SOUL REST IN PEACE.

The Diagnosis of Scrotal Swellings

Dr. R. A. VARMA, M.S.

A PURELY scrotal swelling allows the scrotum to be flexed on the anterior abdominal wall, and if the root of the scrotum is grasped between the thumb and the index finger no extension along the cord is felt going into the inguinal canal. Such swellings may arise in the skin, coverings of the testis, testis, epididimis and lower end of the cord, urethra and the bones of the pubic arch. Swellings connected with the epididimis and cord the testis and the tunica vaginalis are the commonest swellings in the scrotum.

1. **Swellings arising from the skin.**—They are easy to recognise. Commonly are seen, abscesses, sebaceous cysts which are multiple, small and oftener seen here than elsewhere in the body, warts, primary chancre which is an indurated ulcer with a raised rolled edge and of sodden appearance, and epithelioma. The last one may start as a sub-cutaneous nodule or as a wart turning malignant. Fibroma, lipoma and dermoids are occasionally met with.

2. **Swellings arising from the coverings of the testicle.**—Rare, except those arising from the tunica vaginalis. These tissues may be swollen in association with general oedema from any cause or in acute inflammatory processes around the scrotum such as that of ideopathic or Fournier's gangrene. In this condition there is a painful, tense glossy oedema with systemic signs of acute infection, transforming into a cutaneous gangrene in about 3 days time. In extravasation of urine, there is a spreading up of the swelling to the anterior abdominal wall and strict limitation at the junction of the thigh and abdomen, the short history and the fine crepitus felt especially in the scrotum, which make diagnosis relatively easy. In filarial scrotum there is a thickening of the tissues of the scrotal sac which may be very large in size. This oedema may involve the penile

skin. The skin has a *peu d'orange* appearance, is unhealthy with papillomatous outgrowths over it. The same picture is sometimes seen in cases of lymphatic obstruction due to inguinal cellulitis.

The tunica vaginalis may become distended with serous fluid, blood or pus. This distention may be primary as in the ordinary vaginal hydrocele, or secondary to diseases of the testes or epididimis. The ordinary vaginal hydrocele usually arise slowly though some follow injury and give a short duration. There is no pain or urinary complaint. It gives a dragging sensation but not tender. It is pear shaped, is elastic rather than fluctuant; the testis or epididimis cannot be felt separately. It is translucent unless the wall is thickened or the contents opaque. In secondary hydrocele, the amount of fluid is small and the sac is lax. The testis and epididimis can be felt and the complaint is usually towards the primary disease.

Haematoceles may occur as a result of trauma to the testis or to a ruptured blood vessel either during tapping or spontaneously in a hydrocele or in case of haemophilia or purpura.

Varicocele is an enlargement of the pampniform plexus occuring in the young adult and usually on the left side. It produces a fulness likened to a bag of worms above the left testis which may be soft and atrophic. It reduces partially on lying down and gives a thrill on coughing to the palpating hand. It occasionally occurs as a complication to renal neoplasms.

3. **Swellings arising in the body of the testicle.**—Acute orchitis may occur in mumps and other infectious fevers especially in the young, coming on towards the end of the first week. The tenderness and swelling subsiding in a few days. It is usually bilateral.

In torsion of testis there is sudden pain, nausea and vomiting, swelling of the testis and often an acute hydrocele. The cord is tender and shortened, and elevation of the testis increases the pain. Recurrent torsion may occur.

Syphilitic orchitis is usually a tertiary manifestation. Four clinical types are met with.

(*a*) Orchitis fibrosa syphilitica in which one or both testes are atrophied, indurated, irregular, painless and with a slight hydrocele. The epididimis and cord are unaffected.

(*b*) Active gummatous. Usually unilateral and produces a slow progressive, hard painless swelling. Later there is destruction of the outer covering of the testis and scrotum exposing the testis.

(*c*) Generalised sclero-gummatous. In this the testis is enlarged smooth, unaltered in shape, hard and with early loss of sensation.

(*d*) Syphilitic epididimo—orchitis. It resembles tuberculous infection but is usually bilateral. There is no involvement of the cord or seminal vesicles and prostate and pressure gives to little or no pain.

The V. D. R. L. test is fairly conclusive in these cases of syphilitic orchitis.

The tumours of testis may be widely divided into cystic and solid.

Of the cystic ones should be mentioned, spermatoceles which are retention cysts arising from the seminiferous ducts or remains of Wollfian structure. They are collections of milky fluid containing spermatozoa. They may be small or large, single or multiple and sometimes may resemble hydroceles. They are distinguished in that they are situated in the upper pole and are more posteriorly placed. They brightly trans-illuminate. Simple cyst containing no spermatozoa in the fluid may arise from the remnants of Mullerian ducts and have the same situation as above and cannot be clinically distinguished from them.

Although benign tumours of the epididimis occur, nearly all tumours of the testis are highly malignant. The distinction can be made especially in the benign conditions only by pathological examination. Adenoma, fibroma, lipoma, leiomyoma haemangioma and lymphangioma should be mentioned as the benign ones. Some are soft, some have the same consistency of the testicle and some harder. They are painless unless there is involvement of the nerve.

The malignant types fall into two broad sub-divisions, seminoma and teratoma. The former occurs at about the age of 40 and is less malignant and more radio-sensitive than teratomata. It preserves the shape of the testis at least till late. The latter may be again divided into the 3 well known sub-divisions, chorionepilhelioma, dermoid and fibro-cystic disease. Of these the dermoids are less common than those of the ovaries, may occur at an early age and is relatively benign. They contain hair or teeth and occasionally mesodermal or entodermal structures. Fibro cystic disease is little malignant if at all and when it turns so shows sudden rapid growth and metastases. These teratomata occur at the age of

25—30, gives a short history and early metastases. They are rather radio-resistant. These tumours may produce chorionic hormones in urine and hence give a positive Aschheim—Zondek reaction, while in seminamas sometimes gonadotrophic hormones are present.

Pain is not a symptom in the beginning and the testis shows an enlargement of short or long duration. The patient may be symptom free. So long as the tunica albugenia is intact the shape is unaltered and the nodularity that occurs later is when perforation of this covering occurs. With this nodularity is noticed that they are softer compared to the rest of the testis and is a valuable point in the diagnosis. There may be an associated hydrocele, but which is little in quantity and blood stained. The tumour may finally incorporate the epididimis and other coverings of the testis, but adherence to skin and break through is rare. The cord may be thickened due to local spread. The iliac and lumbar glands show metastases early and spread to other groups especially the mediastinal and left supra clavicular occur occasionally. Metastases to lung is early —connon ball secondaries. Inguinal glands show involvement only if the scrotal skin is involved.

When the growth is rapid diagnosis may be easy but in the slow growing ones it has to be differentiated from:

(1) Orchitis, where there may also be a history of injury, the shape is better retained, the epididimis is easily made out and the cord not so thickened. In cases of doubt it is safer to explore.

(2) Tuberculous disease from which it is distinguished by the fact that tuberculosis primarily affects the epididimis, caseation and sinus formation is early and there may be concurrent infection of the other parts of the genito-urinary tract. When as rarely it occurs that the testis alone is involved by tuberculosis, the epididimis and cord are not involved for a long time and the shape is also retained. In such cases biopsy becomes necessary for diagnosis.

(3) Haematocele. This may present some difficulty because of the irregularity and variation in consistency that is seen. But haematoceles grow for a long time and then either stay put or retrogress while a tumour progresses on. The cord is not involved in a haematocele and testicular sensation intact.

(4) **Swellings arising from the epididimis.**—Epididimitis is the commonest swelling of the scrotal contents. It may be acute occuring in the 3rd or 4th week of 20% of cases of gonorrhoea. Diagnosis is relatively

easy and a urethral or prostatic smear is specific. It may occur as a metastatic condition in infectious fevers like small pox etc, or may occur in cystitis or prostatitis of any cause. The epididimis is tender, swollen and painful. The cord is frequently involved. One or both-sides is affected. There is severe pain and tenderness usually of the globus minor and pain in the groin. Systemic reaction may be severe.

Sometimes this epididimitis may be primary with no demonstrable focus. This variety is the non-specific epididimitis—(the filarial epididimo-orchitis of the out patient department!) It is resistant to treatment and may go on for weeks together with no obvious improvement It seldom ever suppurates. The patient complains of a dull aching pain in the epididimis, which may occasionally be very acute. Fever with rigor occurs. The epididimis is swollen and there is an acute hydrocele. The testis may be covered. There is extreme tenderness especially over the epididimis, and may be found along the cord which may be swollen. Even the seminal, vesicles sometimes is tender and enlarged. The skin is stretched and shining with oedema and congestion.

Tuberculous epididimitis is commonest in youth and young adult life. Sometimes it is bilateral and there may be a history of trauma. A painless nodule occurs in the tail of the epididimis and may be stationary for a long time. Ultimately it softens and this caseation may surround the testis along with the secondary hydrocele, both of which tend to obscure the primary nodule. The skin of the scrotum reddens with adhesions to the epididimis and breakes down leaving a fistula. These sinuses are usually situated on the posterior aspect of the scrotum, gumma when it breakes out, does so of the anterior part of the scrotum. The cord may be thickened and the vas becomes nodular. General health suffer little but the process may spread to the bladder. In a large number of cases pulmonary infection is obvious.

(5) **Swellings arising from the cord.**—The commonest swelling is a hydrocele of the cord, which may be seen as a cystic swelling moving with the cord. It may be transilluminable. Lipomas may occur in the cord. They are localised, nodular and firm.

Lymph varices may occur in the cord and is difficult to distinguish from varicocele.

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REMEDIES OF REPUTE!

Ill-fated Anaesthetists

V. RAJAGOPALAN,
B.Sc, M.B.B.S., D.A.R.C.P.S. (Lond.,)
Lecturer in Anaesthesia, M M.C.
& Chief Anaesthetist, G. H., Madras.

IN the following lines, I have ventured to clarify some of the existing misconceptions about anaesthetics and to impress that Anaesthesiology is as scientific a subject as any other science is.

So often we hear some of the junior members of the surgical staff, out of ignorance, remark, "What is anaesthesia; if not pouring some ether on a mask or doing a lumbar puncture and injecting some local anaesthetic drug which everybody can do" and that an anaesthetist need not be a qualified medical person. The lay public go to the extent of assigning the status of a compounder or a nurse to the anaesthetist. What is worse when a junior surgeon loses a patient, the ready excuse comes, "Curare was given and it killed the patient" or "Pentothal was given and the patient never recovered from it." Especially the poor innocent Pentothal is the worst target and nothing annoys an anaesthetist more than to hear Pentothal being blamed by those who have never read its pharmacology. Pharmacology of Pentothal is described later in this article.

Modern Anaesthesiology comprises of, not only mere anaesthetisation of patients for surgery, but also to play the role of a physician to the surgeon regarding the surgical patient, not only in the operation theatre but also in the pre-operative and post-operative wards. Modern anaesthetist bears a thorough knowledge of "Medicine" himself, instead of depending upon the notes of a physician, who may suggest an odd combination not practicable. When operations on the heart are performed as "mitral valvotomy" or dilatation of Pulmonary Stenosis, the anaesthetist must thoroughly understand the abnormal behaviour of the heart during the operation and do the needful to restore the rhythm. In the western countries, the anaesthetist is considered as the competent person to treat cases of (1) Bulbar Anterior Poliomyelitis, (2) Tetanus, (3) Barbiturate poisoning, (4) Relief of pain in painful conditions, (5) Pulmonary oedema etc., etc.

The essentials of surgical anaesthesia are:

(1) Analgesia (2) Narcosis (3) Relaxation (4) Control of bleeding (5) Prevention of shock (6) Fluid balance	Inside the operation Theatre.

Until recently a deep general anaesthetic with ether or chloroform or both, satisfied the first four requirements., but did not satisfy the rest The surgeon's demands were met with but at the cost of patient's comfort. Under this deep general anaesthesia, patients were shocked very soon after the administration, which prevented major or prolonged operations, even in the robust; or resulted in the well-known saying, "operation successful but patient died". Spinal anaesthesia is not devoid of complications. Thanks to Griffith and Johnson, in 1942, Curare was introduced into Anaesthetics. Thanks to Lundy, Pentothal was introduced in 1935 and Humphry Davy anticipating these had already introduced Nitrous oxide in 1899. Thus the modern cocktail of general anaesthesia consists of Pentothal and Pethidine for analgesia and sleep, and nitrous oxide for narcosis and curare for muscular relaxation a combination which provides only light general anaesthesia but with good muscular relaxation, thus avoiding the severe physiological and biochemical disturbances caused by ether or chloroform. Induction of anaesthesia by the prick of needle is pleasanter and this method is characterized by absence of post-operative complications like vomiting, gastro-intestinal or other complications.

Next came the call of the surgeon for control of bleeding during operations, which was answered by the introduction of ganglion blocking agents like methonium group of drugs and Arfonad.

Having put the patient to sleep, having paralysed him with muscular relaxants, and after having lowered his blood pressure successfully anaesthetists could not rest quietly. Attacks on other symptoms like, temperature control of the body, metabolic level of the body also began, leading to cooling of the body and hibernation methods in anaesthesia.

Hypothermia.—Cooling of the body to 80°F showed that at this low temperature:—

(*a*) Blood remains oxygenated, oxy-haemoglobin refusing to part with oxygen.

(*b*) Blood loses the property of coagulation;

(*c*) tissues remain oxygenated due to cessation of metabolic process.

(*d*) general metabolism of the body itself is reduced to 1/5 thereby reducing the oxygen want.

All these conditions favoured the stoppage of the heart for about 15 minutes to enable the opening of the chamber of the heart for either removal of foreign bodies or surgical repair or reconstruction. Surgery for congenital heart disease put a further step forward.

When a few were experimenting on hibernation as a method of anaesthesia with drugs like chlorpromazine* hydrochloride etc., etc. (Lytic cocktail), others did not go to hibernation themselves. Electrical methods in anaesthesia was started at "Mayo Clinic" with the help of Electro-encephalography, once again causing anxiety of turning mechanics or electricians into anaesthetists.

The treatment of tetanus with continuous drip of muscle relaxants is beyond the scope of this short article.

A brief pharmacology of Pentothal alone is included in this article because time and again, not only the civilized lay public but also the medical persons are prejudiced against this innocent drug but for which all the progress in all branches of anaesthesia would have lagged behind.

Pharmacology of Pentothal.—This is an ultrashort acting thio-barbiturate, the B. P. official name being 'Thiopentone Sodium'. It is a yellowish amorphous powder with a sulphurous smell, easily soluble in water. The solutions can be left upto 48 hours without harm. It is supplied in ampoules of 0.5 Gm. and 1.0 Gm. with sterile distilled water ampoules to make either 2½% or 5% solutions in which concentration it is given. For anaesthesia it is given only intraveuously and rectally for basal anaesthesia. Perivenous infiltration or intra-arterial injection should be avoided.

It provides sedation, hypnosis; analgesia and anaesthesia, depending upon the dose given Slow injection enables quick detoxication and detoxication keeps pace with slow injection. Detoxication takes place in all tissues of the body besides liver and hence is not contraindicated in either diseases of liver or kidneys. Within 30 seconds after injection, the drug disappears out of blood stream and gets rapidly distributed in all the tissues to get detoxicated.

* Largactil.

The chief effect of Pentothal Sodium is only respiratory depression but this depression can be overcome by either picrotoxin or 5 c.c. of Nikethamide. There is an incidental fall of blood pressure depending upon the dose and rate of administration, but this fall of B. P. can be counteracted by Ephedrine or Methidrine. The fall is exaggerated in hypertensive patients and hence is sometimes used as a test before surgery for hypertension. Cardiac output may be slightly lowered if fall of B. P. is marked.

Being a parasympathomimitic drug spasm of larynx is sometimes met with.

Excretion: is by rapid detoxication in all the tissues of the body especially the muscle. The liver plays only an insignificant part. The detoxicated products are eliminated in urine but renal disease is not a contra-indication. It can safely be given with depressed liver functions.

The accidents with Pentothal Sodium, usually happen on the operation table itself due to respiratory depression or obstructed airway. The obstruction to airway may happen in post-operative ward immediately after the return of the patient to ward during which time a nurse must strictly watch the patient. Thus the dangerous periods of Pentothal Sodium are either on the table itself or the immediate few minutes following until the patient has become fully conscious.

Carefully and slowly administered with perfect maintenance of airway, Pentothal is as safe as any other anaesthetic drug, if not safer.

★

God created woman. And boredom did indeed cease from that moment—but many other things ceased as well. Woman was God's second mistake.

—*Nietzsche.*

Annual Report of the Madras Medical College Athletic Club

For the year 1953—54.

IT is with great pleasure that I present a brief report of the activities of the club for the year under review. Since the authorities of the college are not paying any attention to the sporting qualities of the potential doctors entering the portals of the institution, it is obvious that the burden of keeping the M.M.C.'s colours flying is still largely upon the senior shoulders. Despite this initial handicap, it must in all fairness be admitted that our representatives in sports and athletics have acquitted themselves creditably. We can really be proud that these outstanding performances have been achieved in the teeth of excessive curricular activities as you all know well, medical education leaves little time for concentration on what are normally considered the bare essentials of out-door life.

Foot Ball.—In the game of foot ball we maintain our reputation as goal-getters par excellence. In the Wadi Memorial Tournament our team defeated Stanley Medical College and annexed the trophy. The Director of Medical Services Lt.-Col. Sangham Lal presided over the finals of the May & Baker Foot Ball tournament in which our college team came out successful defeating Y.M.C.A. College of Physical Education, Saidapet. Mrs. Sangham Lal distributed the prizes. The captain of the team J.K.B. Chandra not only captained the Varsity elevens, but also had the singular honour of being taken in as a member of the Madras State team. Among outstanding players, mention must be made of Dr. P. Madhavan's Constructive Soccer in the pivotal position. Our left in Dr. Viswanathan has proved that even medical men can produce Ahamad Khans. Our centre forward Dr. Poornam needs no introduction in the foot ball world. Our right extreme Mr. Moses of South Africa was much appreciated by everyone. In the defence our stalwart back Kailasam gave nothing away.

Basket Ball.—Munawar Khan is still as good at soccer as he used to be. But it was as captain of our Basket ball team the College honoured him this year. The proof of his successful leadership can be seen from the fact that our team practically walked into the finals in the Inter Collegiate League. To score our points we depended largely on that agile

forward Kingsley, while the fastest of the opposing forwards were held completely at bay by backs of the calibre of Jaya Kumar and Doctors. Palaniappan and Ramaswamy.

Volley Ball.—Madras Medical was in the dim past a side that made every volley ball team shudder. While in some senses leaner years have dawned upon us, our captain Subbiah ably assisted by Kadirvelu, Shivji and other powers has shown on every occasion that we posses the fighting qualities of the highest order.

Tennis.—The sport secretaries in their Annual Report of previous years were despondent about the decline and fall in the standard of tennis in the college. In spite of their repeated protest, we are still able to afford only one court. The captain Dr. K. P. Ramakrishnan represents the college in doubles along with Radhakrishna Rao. The latter also plays singles along with S. V. Vaidyanathan.

Hockey.—In hockey we have had Dr. K. M. Kalappa as captain. No review of the progress of our team can ever be made without reference to the outstanding abilities of Dr. K. Sundararajan as centre forward. Also in the forward line was Prakash showing good dash and finishing capacity. In the half line we depended largely on Rajkumardas James and Asirdas, the latter acquitting himself well in the pivotal position. In the defending line Lobo was as sound as ever, breaking of the moves of the nippiest of forwards.

Cricket.—In my review of collegiate games I have given cricket the last place, but it is by no means the least. It is really here that we have cornered the greatest glory. In the skipper B. S Wilson there is a real Harvey in the making. Quite apart from the prolific runs that flow from his bat he has proved very useful with the ball as well. S. V. Vaidyanathan thinks nothing of being the captain of the Varsity team he is now a prominent member of the Madras State team. The man with the deadly "slower ball" was invited to the net during the Madras Test match by the board of control for cricket in India. Dr. C. V. Korah and K. S. Viswanathan open our innings and the latter was included as the wicket keeper in the Varsity team. Among other outstanding cricketeers are Dr. L. D. S. Mani, Dr. Asgara Ali with his accurate spinners and Dr. Gopinath Rao, our pace man.

Throw Ball and Tennikoiet.—From what I have said it appears as though M. M. C. breeds sportsman ad lib. I am afraid this impression requires material qualification. I refer to the fair sex of this college from whom there has been no outstanding performance this year. This at least I would say, in letting the honours go to other colleges they have not only

shown a genuine desire to encourage younger blood, a commendable thing in itself, but they have also shown that if one has to die, it is possible to die gracefully.

During the last year Mr. M. Swamynathan, our Physical Director left us to take up an appointment in the Ministry of Education, Government of Ethiopia. A very pleasant function was got up to bid him farewell and tributes were paid to his services. We wish him well in his new post. We welcome Mr. S. Srivatsan who has been appointed in his place.

During the last year some of our outstanding players have left us. I mention only those whose departure has in a very serious way paralysed the teams to whose success they contributed. Dr. P. Madhavan was not only an excellent soccer player but what is more, it was in a large sense due to him that M. M. C. reached its position as a power to contend with in collegiate games. It is very rarely that it falls to any one player to shoulder the responsibility for an entire team. It can, I think, be said that Dr. K. Sundararajan did this and more for our hockey team for quite a long period. The last and the least in a purely physical sense I mention Dr. Rajsekhara Reddy. Versatile players are now an entirely uncommon feature in the sports today. To achieve distinction in every sphere however calls for rare ability and this Raji certainly showed in his performances in Basket Ball, Athletics and Tennis.

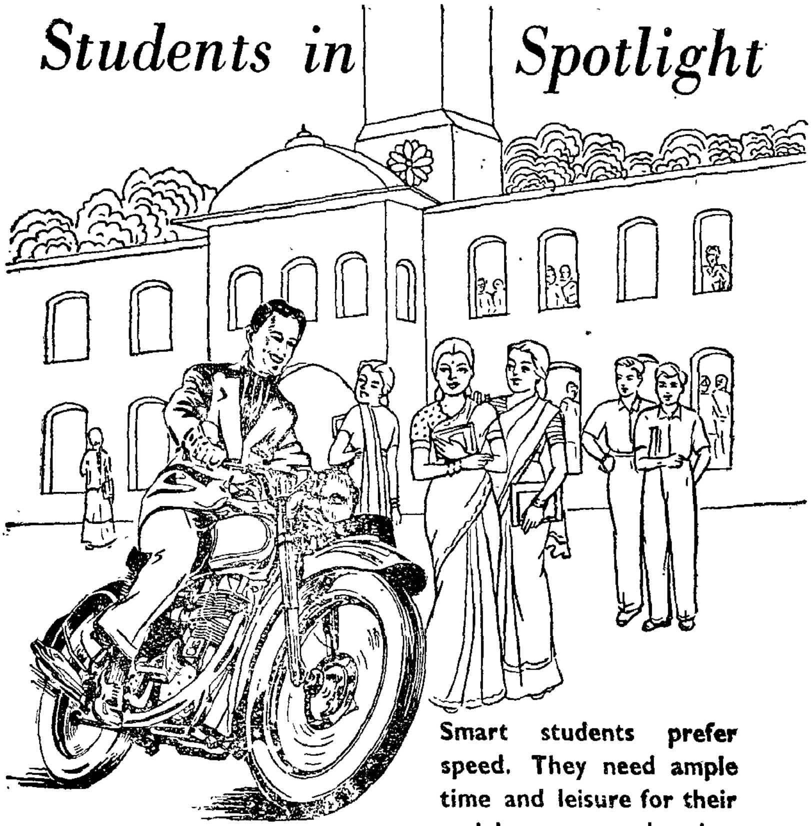
This year the Athletic club has taken an unprecedented step in presenting every player with a blazer. In the previous years blazers were given only to outgoing members of our teams. It is a good thing and in every sense a step in the right direction emphasising as it does in the importance of sports in collegiate life.

Before concluding I would like to draw your attention to want of co-operation and enthusiasm in several quarters in regard to the activities of the club that has been noticed during this year. While it is hardly my intention to deprecate such a state of affairs though I am the first to admit that medical education and extra curricular activities *ipso facto* incompatible, I have not the slightest hesitation in saying that both for ourselves and for the college it is definitely a bad thing.

In conclusion, I would, therefore, earnestly appeal that we trust this in no uncertain manner and take every precaution to see that M. M. C. retains its pride of place in every field of sports in the years to come.

ANTONY P. ALAPATT,
Sport Secretary.

Students in Spotlight



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The Annual Report of the M. M. C. Hostel Men's Section

Respected President, Distinguished speaker of the evening, Ladies and Gentlemen.

IT is my proud privilege and pleasant duty in this fine evening to place before you the report of the Madras Medical College Hostel, (Men's section) for the year 1953—'54. This year 1953—'54 has been rather uneventful, inspite of the many storms in tea-cups.

We are a group of 325 students in this Hostel, and its extension the park Hostel, which has been happily termed as the Fourth flat. This year there has been a record number of admissions to this hostel, due to the fact that there has been a record number of doctors who left the hostel. That is as it should be, and we are glad of it. Though we would like to accommodate every student who wants to get admitted, the hostel is already so crowded, that it is becoming to be called the "Black hole" of Madras. We can hardly afford to buy furniture for the new comers, and every third member of the room is forced to sleep on the floor. Initiation ceremony for the new comers have been reintroduced, and as this was harmless, the freshers welcomed it.

Our activities started with the Independence day celebrations, with the flag-hoisting by our beloved ex-warden Dr. R. Subramaniam. After the flag-hoisting, Dr. R. Subramaniam, in a short but inspiring speech appealed for the constructive ideas and not to indulge in destructive policies.

The graduates' reception was presided over by Dr. C. K. Prasada Rao and Mr. Justice E. Mack addressed the graduates. Though on that occassion we were not overjoyed, when the heavens rejoiced (I mean, it rained that day) the learned judge's speech, with his numerous witticisms were heard and appreciated by one and all present.

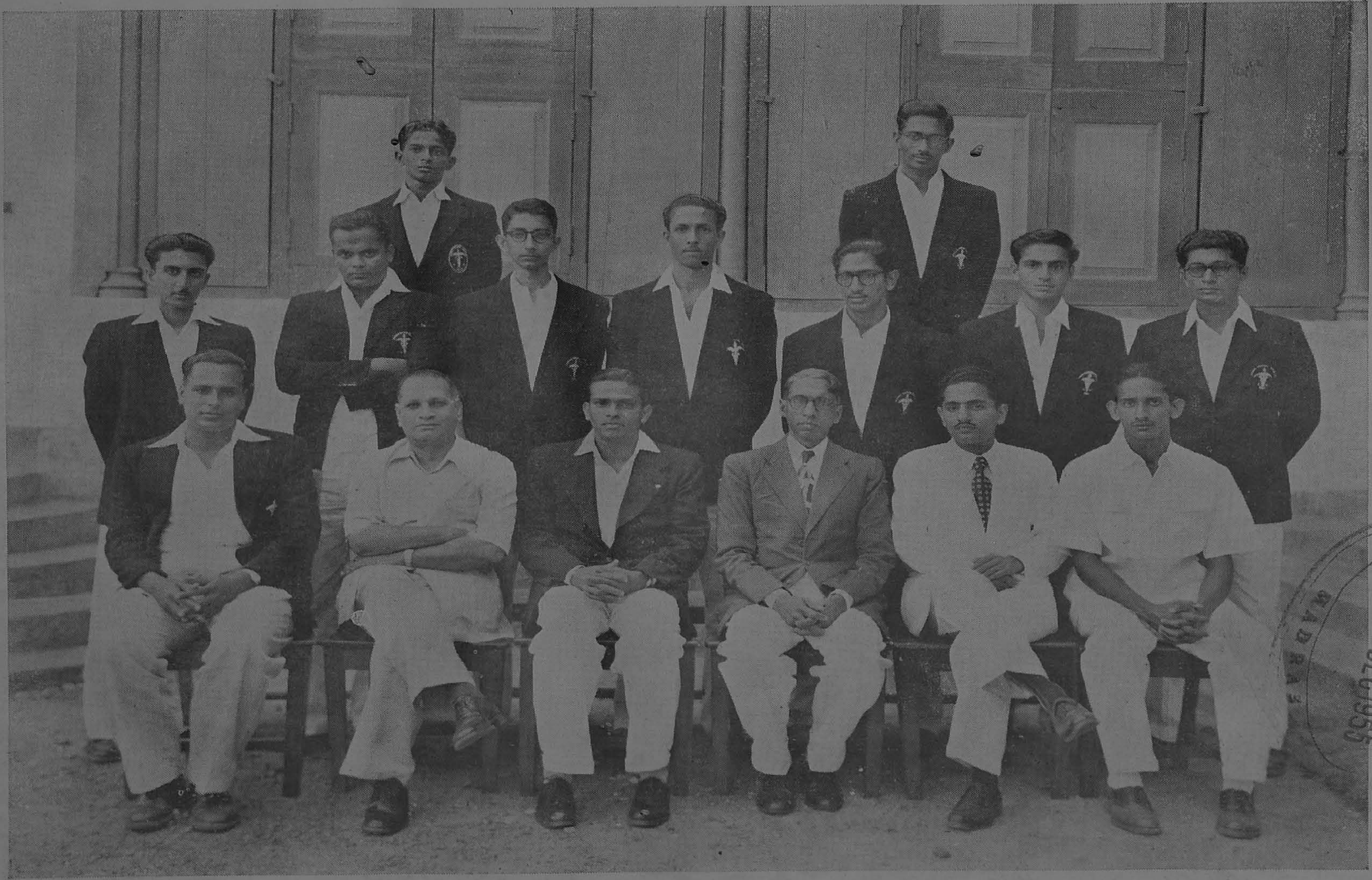
The Onum and Pongal Day were celebrated in the usual festive manner and the inter-collegiate music competition on the Pongal Day was upto its usual high standard. The presence of Finance Minister added lusture to the occasion And so were the sports and oratorical competition. Yesterday was a gala day for some of our runners, since they ran the cross-country race late at night. The destination was of course our ladies' hostel and I am glad to say that all of them returned safely without any casualty on the way, and presently you can see the first four receiving the coveted prizes.

Our reading room, which started its library modestly has been subscribing to many popular magazines, all of which are read eagerly by members. But the library inspite of the kind donation of 100 books from the U.S.I.S. is still very modest and does not contain a single medical book. I appeal to one and all particularly our teachers, to contribute books or money or both, to enable us to buy some reference books and subscribe to some medical magazines for which, now we have to run up to college. A medical dictionary for instance, would be most welcome.

We are proud to be able to help the Medical Relief Wing of our College by lending our bus every Sunday, so that they can go to the Village Pakkam, and help the needy. We consider it a privilege to be able to lend a hand in their worthy cause. It is really very unfortunate to note that while we are the proud possessers of two beautiful buses, there is no shed to house and shelter them against the sun and rains. So, may we request the Government to be kind enough to provide us a temporary shed. This year also we played host to the Utkal varsity medical students and students of Christian Medical College, Vellore. And I have been asked to convey their thanks to all the members of our hostel.

It is my sad duty to record the untimely demise of our beloved ex-warden Dr. P. Ratnasamy. Death had been really unkind to have snatched away from us the brightest flowers of the Medical field. Our heartfelt sympathies at the irreparable bereavement have been already communicated to his family. May his Soul rest in peace.

I should be failing in my duty, if I do not mention our gratitude to our warden and deputy warden. Dr. Sadasivam who topped the polls in the popularity contests even when he was just a teacher, now as a warden he has captured our hearts by his unassuming demeanour and patience. Our deputy warden is running a close second to Dr. Sadasivam in popularity and his conscientiousness and sincerity is admired by all.



CRICKET 1953—'54.

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FOOT-BALL 1953—54.

Before closing, I want to make our usual appeal to our rulers—to give us a hostel of our own near the college. The present one, though, we are now used to it, is three miles from the college and nobody understands better than our minister, Hon. A. B. Shetty, that our need is great. The Honourable Minister has always been interested in Medical Students and this was clearly in evidence when he made a surprise visit to our hostel. Therefore we are sure, our appeal will be lent a patient hearing. It is an irony of fate, that when our neighbours the students of the College of Indigenous Medicine, which iss till in her teens have got a new pucca hostel of their own, we who have celebrated our centenary 2 decades back are forced to live in rented buildings.

At the end of the term of my office as General Secretary of this hostel I feel that any success that may have attended on me is due to the unstinted support of the various representatives of the Hostel and I take this opportunity to thank on be half of the representatives and myself the members of the Hostel, the Wardens, and our Dean Lt.-Col. C. K. Prasada Rao, for their help, guidance and support.

Thank you.

JOSEPH CORERA,
General Secretary,
M. M. C. Hostel (Men's Section,) Madras.

HOSTEL DAY,
28th February, 1954.

—★—

He who has a thousand friends has not a friend to spare,
And hewho has one enemy shall meet him everywhere.

—*Emerson.*

*   *   *

If men knew how women pass the time when they are alone, they'd never marry,

—*O. Hentry, Memoirs of a Yellow Dog.*

*   *   *

Believe a woman or an epitaph,
Or any other thing that's false.

—*Byron.*

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Madras Medical College Ladies' Hostel

Annual Report for the Year 1953—'54.

IT gives me great pleasure to present the report of our Hostel for the year July 1953—April 1954. The hostel is under the direct control of the Dean of our College and Hospital, and is managed by the Warden, Dr. (Mrs.) E. Roberts, assisted by a house-keeper and a committee elected from among the members of the hostel. The strength of the hostel at present is 96 and the average for the year has been 90.

Activities.—The year commenced in July 1953 with a business meeting, when the following members were elected as the office-bearers of the Hostel Committee :—

General Secretary	:	Marie Lobo.
Mess Secretaries	:	K. Anusuya. Rebecca Mathew. Anna Thariyan. N. Sathiavathi.
Flat Representatives	:	V. Rajam. M. T. Sushila. Malathi Suvarna. R. Kausalya.
Medical Officer	:	Lila Nair.
Garden Secretary	:	Minnie Ponnappa.
Reading Room Secretary	:	Sunalini David.
Sports Secretary	:	N. Sathyasundari.
Machine Member	:	P. V. Sundari.

Very soon, the First Year Students arrived, followed by the usual ragging of the freshers. And after a week of fun and frolic, it ended up with an entertainment by the freshers and a party by the senior members.

On Saturday, August 15, early, in the morning, we had flag hoisting and salutation in our hostel, in solemn observance of the Independence Day, before joining the general body of our College Association for a similar function on the College grounds.

The next event was a pleasant surprise to us. The United States Information Service, Madras, presented us with one hundred books—for which we are ever grateful. This has formed the nucleus of a little library which we hope to enlarge with our funds in due course.

Life was astir again in the hostel towards the end of January 1954. During the first week of February, we had our Sports Day, followed by the Hostel Day on Wednesday, February 10, 1954. Dr. C. K. Prasada Rao, our Dean, presided and Rev. A. J. Boyd, Principal, Madras Christian College, Tambaram, was the chief guest. We did spend quite an enjoyable evening with him. We had tea at the hostel, followed by a variety entertainment in our College Examination Hall and a dinner at the hostel.

To our great delight we were recently presented with lovely sets of indoor games by the Lady House-Surgeons—April 1953 and December 1953. This has been an impetus for some outdoor games too. We have laid out Badminton and Tenniquoit courts. On Tuesday, March 2, 1954, we had the inauguration of our Sports Association by the House-Surgeons. Both the indoor and outdoor games help us to spend many an idle hour happily.

Before I conclude, I must say that the authorities concerned have till now been turning a deaf ear to our request to reduce the room rent which is at present Rs 10/- per head per month. We do hope, in the near future, the matter will be settled to our advantage.

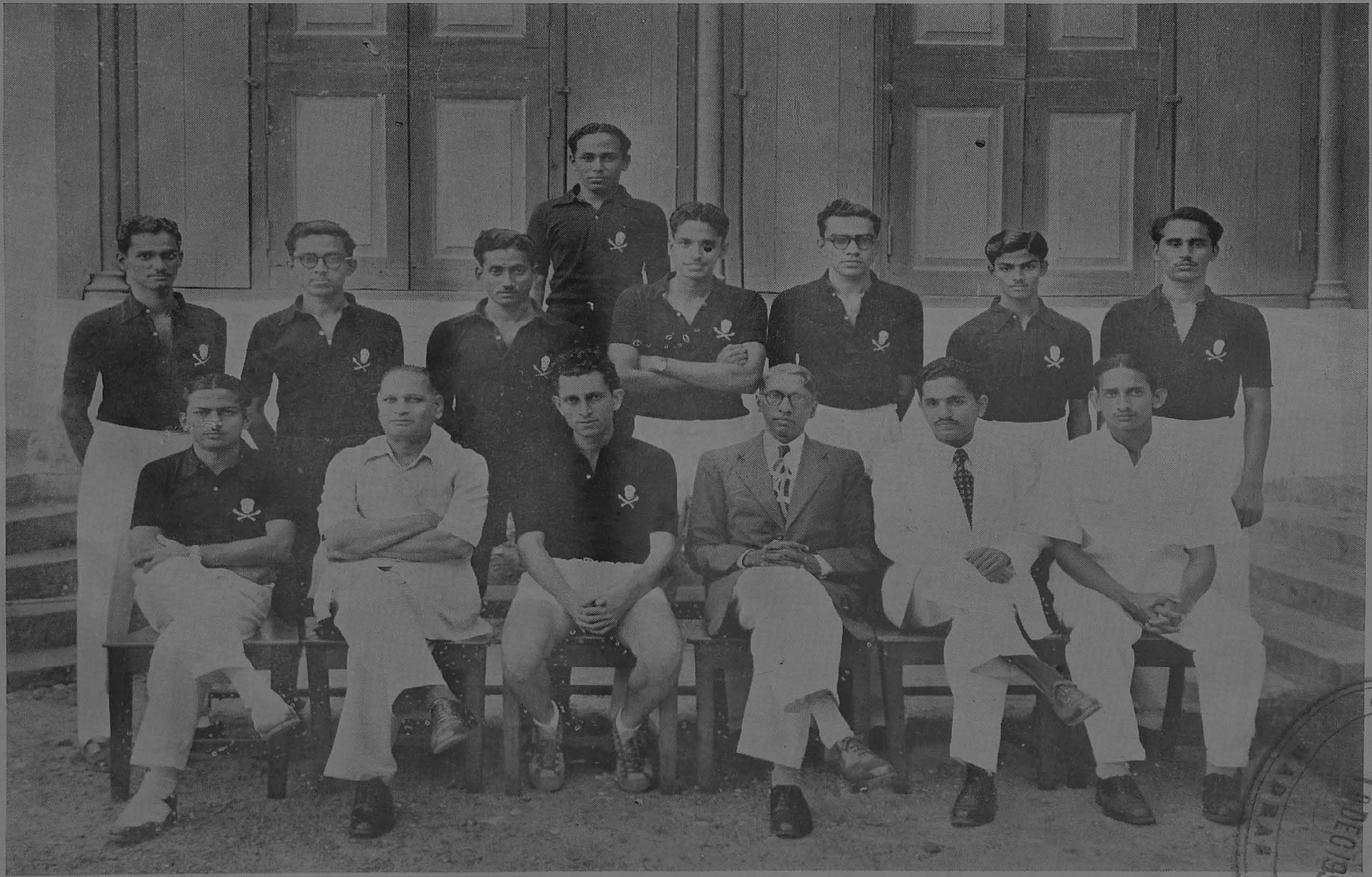
MARIE LOBO,

General Secretary,

Madras Medical College Ladies' Hostel.

MADRAS,

April 1954.



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THROW-BALL 1953—'54.

Madras Medical College Association

(1953—1954)

"Symposium on Undergraduate Medical Education"

RECORD OF PROCEEDINGS

OF

Meeting held on Saturday, August 29, 1953.

C. B. MOHANDAS, B.Sc.,

President.

P. C. UTHAPPA,

General Secretary.

Symposium on Undergraduate Medical Education

C. B. MOHANDAS, B.Sc.

AN inter-collegiate discussion in which students and professors spoke on matters relating to medical education was held in the Examination Hall, Madras Medical College, at 2-15 p.m. on Saturday, August 29, 1953, under the auspices of our College Association. The discussion extended over three hours and fifteen minutes and was quite lively.* I had the honour of presiding over the proceedings as the then President of our Association and we had the pleasure of having Dr. P. Kutumbiah, Principal, Christian Medical College, Vellore and member, Board of Studies in Medicine, University of Madras, as the Observer.

By way of introduction, the "President" spoke as follows:

"The object in organizing this symposium has been mainly to elicit what is going on in the minds of students and to provide them with an opportunity to express their difficulties and feelings. I am fully aware of the fact that nothing may come out of this. Our idea is certainly not to gain anything or achieve anything whatever. I assure you all it will not be fair on the part of any one to think on these lines.

"For we all know, on how many occasions, a great many people, with competence and extensive experience, have tried to express views, most of which have not been accepted, to put it in a mild way, and, which, perhaps, have been turned down violently, to be more near the truth.

"We also do not wish to make any reference whatever to any controversial matters—such as re-introduction of the shorter medical course like the L.M.P. of days gone by. I feel these aspects of the subject are out of bounds for us. If any students taking part in today's discussions intend or have intended making reference to such considerations, I appeal to them to abstain from doing so. Let us confine ourselves to expressing some of our difficulties and wherever possible try to offer some suggestions or constructive criticisms concerning the set up of our present studies only.

"I wonder how our teachers and examiners have taken the idea of this meeting. I know some of our Professors are not quite happy about it. But they have admitted it to me that the idea is good and the experiment is good and that we can go ahead with it. I hope I may appeal to all our Professors and Teachers to give their blessings and help us feel easy about our discussion.

" I also appeal to all not to compare this attempt to meetings of debating and other societies like mock trials, mock parliaments, mock U.N.O. sessions etc., which are held sometimes in High Schools and Arts Colleges, but to regard our experiment as quite a real and serious affair.

" The views which may be expressed here to-day need not necessarily be regarded as the personal views of any particular student nor as the official views of any of the three Medical Colleges. Nothing need be taken too seriously by anybody, and it may be unfair also if such a thing were to happen.

" I am very grateful to students and members of staff of our sister Medical Colleges—Stanley Medical College, Madras and Christian Medical College, Vellore, for their most kind and affectionate response to our request for their participation in our proceedings here today. Looking back, I must admit it was an ordeal for me every time I attempted to contact the student officers of Stanley Medical College, though it is quite close to us. On the contrary, in the brief space of one Sunday afternoon in Vellore, early in August, I was able to meet the Student-President and Secretary of Christian Medical College, Vellore, and with their help also Dr. Kutumbiah and Dr. Brand.

" I am very grateful to Dr. P. Kutumbiah for his ready consent to be the Observer in this Symposium and also to Dr. Paul W. Brand for his willingness to come and speak to us. I must also offer our sincere thanks to Professors closer to us, Dr. Valiath of Stanley Medical College and Dr. Govinda Reddy of Madras Medical College for their coming forward to represent the staff members.

" This week a World Conference on Medical Education has been going on in London. It has been quite unexpected for me to find our miniature scale meeting almost coinciding with this Conference of the world's distinguised doctors and medical educationists. I was somehow thinking the World Conference was in September and we could have the pleasure of having the company of our Vice-Chancellor, Dr. Sir A. Lakshmanaswami Mudaliar, with us in this Symposium before his leaving for London. But it has to be admitted that we cannot have everything as we wish.

" I have a most pleasant announcement to make now. At extremely short notice, the Manager of Nestles—Madras Branch, has most kindly come forward to provide a cup of hot Nescafe or hot Milo, whichever you may like to have, to all who are attending this little conference of of ours today. Our most sincere and delightful thanks are therefore also due to Mr. Tharakan Mathews, Manager of Madras Branch of the Nestle's establishment.

"I have now the greatest pleasure in inaugurating today's proceedings in this, our Symposium on "Undergraduate Medical Education", in which three Medical Colleges are taking part and which is the first of its kind in the history of our College."

Mr. A. Varadarajasundaram, Final Year Student of Madras Medical College and Editor of Madras Medical College Magazine during the academic year 1952—1953, opened the discussion. His opening speech richly deserved the high appreciation it secured from one and all present. The following is a summary of Mr. Varadarajasundaram's reference to the objects of undergraduate medical education and some aspects which should receive greater stress in medical teaching in future.

"The modern physician, if he has to meet his responsibilities in the prevention, diagnosis and treatment of disease in society, should take a host of psychological, sociological, economical and environmental factors into consideration. This need must be kept foremost in mind in formulating methods of medical education.

"To give a comprehensive idea of this subject in a limited time is not possible. One has to confine oneself to a few aspects only of the subject.

"First, emphasis has to be made on Preventive Medicine in undergraduate medical education. Medical education in the past has been concerned chiefly with the practice of curative medicine. In recent times, Public Health and Preventive Medicine have been receiving increasing recognition. Most of the maladies and disabilities can be prevented by a more positive and effective programme of preventive medicine. One must always bear in mind the fact that preventive medicine begins even in the environmental conditions in the home, school, administrative offices, factories etc. The major problems of preventive medicine in the future lie in the new sphere of occupational disease, malnutrition, psychoneuroses, social deficiencies, health education etc. These factors have to find a place in the new undergraduate medical education.

"In medical education, it is not enough if one just goes round merely looking at things, making notes about them and just thinking of accumulating interesting facts. The aim in the new undergraduate medical education must be such that one will be stimulated by what one observes and be curious about it. Imagination, curiosity, intuition perhaps must be the fundamental things which must be stressed in medical education. The progress in medical education and science depends on those students who *retain* their vital impulses of curiosity and imagination throughout their lives. The present system blunts rather than sharpens these essential

qualities. The foundation of undergraduate medical education must go deeper. Methods and techniques are the apparatus and tactics of science and it should not be confused with the spirit and purpose behind them.

" Another point that needs emphasis in undergraduate medical education is psychosomatic medicine. The inter-relationship of the emotional and mental life and the physical manifestation of disease must be understood by every student of modern medicine. Knowledge of the physical and social environment of the people is of utmost importance in interpreting some of the predisposing and causative factors of illnesses. Some psychic and emotional responses to untoward environmental conditions have been linked directly with the physical changes in the tissues of the body recognizable as organic disease. This is what is currently known as sociopsychosomatic medicine. This must be emphasized in undergraduate medical education.

" No physician can become accomplished in this most difficult art of healing unless he has a kindly and friendly feeling for the people around him. This calls for the humanism which is most necessary for the understanding of the physician-patient relationship. Science becomes human through friendliness and human touch. Without this element in Medicine, the character of our age can only be crudely material and methodical.

" Lastly, a few words about the teaching of the history of medicine. History of Medicine usually consists of a catalogue of outstanding scientific advances in medicine and the great men who have figured in the field. We must make an effort in undergraduate medical education to bring in, in an organized way, the teaching of the history and progress of medical science as it is important in the study of modern medicine and also in the study of the reciprocal relation of medical science to other sciences."

Miss S. Gnanasundari, Final Year Student of Madras Medical College was the first speaker to attempt to refer to some of the difficulties experienced by the students at present and to offer some suggestions for consideration by the authorities. Miss Gnanasundari spoke as follows:

" As our friend has just now placed before you an outline of the aims and objects of undergraduate medical education, I propose to confine myself to offering a few suggestions.

" Taking up the pre-clinical stage first, we find that there is overcrowding at the dissections. The number of students allotted for each part may be decreased. Then each student will get more chances for dissecting. As Anatomy is the basis for Surgery, students should be provided with more opportunities for actual dissection and careful study of the subject.

"As far as Physiology is concerned, I feel more emphasis can be laid on histological sections, as they form the basis for Histo-pathology which in its turn is all important in diagnosis. At the same time, the number of exercises in experimental physiology could be safely reduced. Especially the graphic representations on smoked drums, which unfortunately tend to try the patience of students to the utmost, could be shown in demonstration classes and special film shows as is being done in Pharmacology.

"The elaborate procedure adopted in admitting students to the M.B. & B.S. course of study is almost equivalent to moving mountains. And time and again it is said that the cream of the student population of our state comes into the medical colleges every year. After all this, to find over 50 to 60% of candidates being detained in the second year University (First M.B. & B.S.) Examination is really deplorable. On the blooming, buoyant youth, who is full of firy enthusiasm, it acts as a great calamity by crushing his spirit and dampening his enthusiasm. If only the examiners can show a little more magnanimity and generosity, it will be a relief to the unfortunate victims!

"Now as for the clinical stage—the changes in the syllabus for the new regulations course of study extending over a period of four and a half years, though at first sight make us feel as though the student is let off easily, by not having to study some subjects, in the long run it may affect the integrity of knowledge. It is not the quantity but the quality that matters. Because of the higher standard of knowledge only, we have survived in the prolonged struggle for existence. Figuratively speaking, the field of medicine can be compared to a vast natural garden containing useful herbs and flowering plants and useless weeds side by side. Just as the weeds try to choke out the herbs, so also quacks try to oust out the scientifically trained doctors. The cutting off of special pathology which is the root of diagnosis as a separate study is not at all acceptable. Detailed study of Pathology forms and should continue to form a strong, central foundation for sound medical knowledge.

"Hygiene, as such, seems to have gone out of the picture, but it appears in the new regulations in another form as "Preventive and Social Medicine." Unfortunately this takes a new place as an additional ordeal in the final qualifying examination. It will mean increased stress and strain for students. Any way we only hope the imparting of instruction in the subject can be continued by the Staff of Hygiene Department and not handled by the Professors of Medicine to enable the latter to concentrate on the teaching of the Science and Art of Diagnosis and Healing.

"With regard to one aspect of clinical studies, there is too much of overcrowding in the out-patients department—both by patients and students. It is desirable to evolve some regulated procedure so that

teaching can be more useful and effective in this part of the training. Also on the Medical side, it is desirable that students are given more chances for practical work. Every student should have practical experience of simple diagnostic procedures like lumbar puncture and sternal puncture before leaving the institution. More and better opportunities for students to witness important operative procedures are wanted and if students can be allowed to assist in operations in rotation, it will be wonderful. In the final year of study, if internships can be arranged for students for one month during medical and one month during surgical postings, as it is being tised in midwifery, the arrangement will provide thorough training. Then only there will be scope for fresh graduates for dealing with emergencies with confidence even immediately after qualifying. As the usual slogan of the lay public is "Go to the villages", I think this sort of compulsory internships will go a great way in achieving the object of turning out an absolutely dependable general practitioner.

"Abroad in other countries, we learn nearly 85% of students admitted to medical study complete the course within the prescribed duration. Unfortunately in our case it happens to be just the reverse almost and more or less 15% of the students seem to be able to complete the course in proper time while the rest have to face stoppages at various stages en route. We can only helplessly look up to the authorities to find out where the fault lies and what the remedy should be to improve the situation.

"There is one other thing I wish to refer to. Students who pass the final qualifying examination in April have to wait for four months for their appointment as House-Surgeons, whereas the December exam. students have to wait only for two months. We wish some effort is made to equalize the intervals".

Mr. T. Subramanian, Final Year Student, Madras Medical College, followed with an impressive, spirited extempore oration. His speech is therefore not available in its entirety, but the following points, noted down as he was speaking, give the essential features:

"(i) Pre-medical education—The Intermediate course is not of a high standard. A higher qualification should be prescribed as the minimum for admission to medical studies. (ii) In the matter of admission of students to medical colleges, emphasis should not be laid merely on intellectual attainments but physical fitness should also be considered, remembering the ancient saying "A sound mind in a sound body". And after admission, in addition to instruction and academic examinations, periodic medical examination and check up of students is necessary. (iii) There should be more scope for extra-curricular activities. (iv) The present course lays too much stress on theory and practical aspects are neglected. There is need for improving the course and a change in the

system is desirable. There should be more of understanding among students and teachers. Students must be given opportunities of doing a few simple things like lumbar puncture etc. Human touch must be promoted. (v) Preventive Medicine—present system is not satisfactory. More field work than theory is necessary. (vi) Examinations—present system should be changed. We should have periodical examinations rather than final examinations."

Mr. P. Balagopal, Final Year Student of Stanley Medical College, spoke next. The main features of his speech are as follows:

"(i) It is essential that in the admission of students to medical colleges, there should be a general standard which should not be too rigid. Secondly such a standard should not be based on ideas from abroad but on circumstances and conditions existing in our country—the standard of Indian students in India. (ii) With regard to the medical curriculum, greater emphasis must be laid on the practical aspect of teaching and the subjects must be arranged in a better way. In the existing system of teaching there is greater stress on theoretical considerations rather than on practical aspects of subjects and there is less of contact between the teacher and the taught. All these need to be changed. There should be greater stress on practical aspects of medical education and more value must be attached to work in wards and laboratories. (iii) A radical change in the system of examination is desirable. It will be better to have weekly tests and the examination can be divided into parts and marks allotted separately for class work, ward work, work in the laboratories as well as performance in written and practical or clinical tests."

Dr. Irwin Samuel, Final Year Student of Christian Medical College, was the next participant in the discussions. Dr. Irwin Samuel said medical education as it exists today has neglected many fundamental conditions and stressed conservation of the spirit of scientific enquiry and the training of students in scientific attitude. Just memorizing of facts and details is not enough and the examinations are not real. Our present curriculum is not educative, comprising of ever so many lectures covering ground which the student can read himself. There is need for independent work and a student should work on his own. Referring to the Clinico-Pathological conferences held periodically in their college, Dr. Irwin Samuel said what they do is that in regular class hour meetings, a teacher announces a problem or topic, followed by silence for ten minutes during which the students and teachers present think on their own and at the end of the period all their ideas are pooled and gradually a complete solution or answer is evolved. He said adoption of a procedure like this in all the medical colleges for any subject may be a great step forward. And so the curriculum should be stimulative and the relationship between teachers and students has to be improved. For

this purpose the number of students should not be great as at present or at least some sort of shift system should be resorted to so that there is more teacher-student understanding. Lastly he said students should have more opportunities. Extra-mural clinical practice will be a great asset in that it promotes human interest. Senior clinical students, if allowed to cheer up and tackle patients all on their own, as is being permitted in the rural service work of their college, will be able to learn a great many things.

Mr. Kalyanaraman, Third Year Student of Stanley Medical College, speaking next, said learning should begin the moment a student enters the college. Minute details need not be stressed and the system and curriculum need improvement with greater stress on practical aspects. He was of the opinion that examinations as they are existing today are not desirable and that human aspects and students responsibility are of very great importance and there is need for complete reorientation and change of mind.

Miss Agnes Cameons, Final Year Student of Christian Medical College, Vellore, was the next to speak. If an attempt is made to condense what she said, I am afraid the effect will be lost. It will be best to reproduce her speech in full and so here it is :

"It is not mere wishful thinking when we say that education is a life-long business and medical personnel, above all, *must* derive their impetus from the education they receive. The ancients endeavoured to make it a science and failed and the moderns to make it a trade and have succeeded; and the *embryo* doctor, faced with sickening commercialism and his anaemic imagination, is the freak child of the medical world.

"*This* is the hour when medical education seems to be in the smelting pot of the ages. Conferences all over are aiming at a higher standard, urging medical men and women to play their part in elevating the spirit of democracy, as well as curing bodies, so that "free society" might not end with physical ills, sick souls, empty hearts and machine minds!

"There is a silent agreement that reform of the medical curriculum is both a compelling and an urgent need; but, the required changes are far more radical than is generally conceded. The focus should be on the coherence, continuity and inter-dependence of all parts of the curriculum. To be educationally sound, the student should recognize that each part has an important bearing on the part that follows. The student and the teacher are the crucial elements in the educational campaign.

"A haphazard entry into a Medical College, because of some fascination, or as a means to an end, is *disastrous*. The medical student, like a poet, is *born* and *not* made. So a wise selection should be made, when one ventures into the field of medicine—for, medical students can rightly be called the future architects of India's Health.

"Pre-medical education should be supervised more efficiently, and, if possible, anticipate the first two years of the medical curriculum. A sound introduction to the study of medicine should form part of the pre-medical course; and the subjects physics, chemistry and biology be dealt with as applied to medical studies and not as isolated subjects in themselves.

"There is a strong view that there should be no vocational bias in the pre-university studies, and premature narrow specialization be banned. This is the *ideal*; but as Galen wrote centuries ago, several (at least eleven) years are necessary to attain this goal. For a country like India, such an educational programme would stultify our plans to establish a permanent national health scheme. We need doctors who are intellectually independent, physically fit and financially sound, and trained in a reasonable period, to man every outpost and carry the drug to the diseased. There is a growing feeling that in order to accomplish our aims, it is but essential that the minimum age for entrance into the medical course be higher than the present standard of 16 years and 8 months; for, *only* then, can *men and women* who are sufficiently mature be chosen for this great and noble profession.

"**Pre-clinical study.**—In this period, the basic sciences are augmented and expanded—because this gives the habit of clear and logical thinking, which are necessary weapons for the student, and do not come as a bi-product of mere cram work. Much of the disappointment with the pre-clinical studies is because it is regarded as the *Cinderella* of the course. This new craze for rapid education demands that anatomy and physiology be taught *purely* as applied sciences—a paradoxical demand—for, one *cannot* apply till one has grasped the fundamentals. Whether we should study these as pure sciences is another question altogether. Rather than teach anatomy and physiology as purely applied sciences—a good knowledge of the subjects, together with a reasonable assignment of applied anatomy and physiology with some of the more important and relevent clinical aspects of the subjects—during the the pre-clinical course—would be a more happy solution to the point in question. Minutiae can be relegated to the field of specialists; but a sufficient body of knowledge should be given, so that medicine and surgery are not later crippled. The importance of Anatomy and Physiology to clinical subjects will be appreciated only if the stimulus given in the pre-clinical period is effective in the clinical.

"Field work *is* essential in order to understand rural health problems—which are alas innumerable in India—and as such it would be extremely useful, if every medical student spends at least a month out in rural areas, to study the actual existing conditions and the practical means of making Preventive and Social Medicine a tangible science—rather than study the intricate mechanisms of sewage systems from books alone.

"Yet another aspect of emergency services is that of the casualty services. It would indeed be very useful, if every student in the final year, stays within the premises of the Hospital during the assignments in the departments of Medicine and Surgery, as it is being practised in Obstetrics now. This would give a chance to the students to see the cases as they come in, and give a more avid interest in their clinical work, and enable them to acquire a greater deal of experience—than would otherwise be possible. This proposition, if adopted, would also to a great extent help to solve the problem of providing internship for the medical graduates in their own hospitals, due to lack of accommodation and other difficulties existing today.

"**Methods of Teaching and Learning.**—Teaching should be more on the practical side, with *less* of lectures. Students on the other hand, should not be the passive receptacles of knowledge imparted to them by their professors. Individual intelligence should be trained in quest of newer knowledge and every encouragement should be given—to enhance the facilities for individual work among the students.

"*Men must be taught as if you taught them not*
And things unknown proposed as things forgot"

"**Examinations.**—Doubtless it is that both students and teachers are dwarfed by the fear of examinations, and one might well be tempted to say that examinations should be abolished—and instead day to day progress be assessed—but, this in *itself* must not be the criterion—for in medical education, where young men and women are being trained to go out to all parts of the country, with the great responsibility of the sick and the suffering entrusted to them, it is essential that there be a system of examinations before qualifying and registering as medical practitioners. But, final examinations alone must not be the basis of judging the efficiency of students—for oftentimes an examination becomes a matter of luck. So I would like to add that the everyday progress of students *should be taken into* account, along with their performance at the examinations.

"Regarding the existing arrangement for conducting medical examinations—*viz.* twice a year in April and December, there is a general feeling among students that the interval between the April and December examinations is a rather long one and it would certainly be an immense

help if these examinations can be held at six month intervals, say—April and September or October, as for the Intermediate and B.A. Degree examinations.

"**Internship.**—Compulsory internship now being introduced as a regular feature of the revised regulations for the M.B. and B.S. Degree Course, will certainly benefit those to whom it will apply. No doubt it is absolutely essential for any form of higher studies in the medical field—but it is not every medical graduate who would desire to go up for higher studies or have the facilities to do so. We do feel that every medical graduate, regardless of his plans for the future, should have a year of compulsory internship, for it is only during this period that one does appreciate the responsibilities of dealing with the sick, and without this, young medical practitioners working in rural areas, may be like crippled doctors unable to meet the need.

"There are many problems confronting the education of a medical student, but they are not more different than the continuous education of the general practitioner—for with him are the issues of life and death. No class of men need so greatly to keep abreast with the march of time! —and it is up to us, the future architects of India's Health—to go out with an open mind in search of knowledge and to rise to the occasion and give freely of our service to the many who need it—and a good and thorough undergraduate education is necessary to obtain this goal."

Mr. M. Muthuswamy, Third Year Student, Madras Medical College, followed next. Mr. Muthuswamy was of the opinion (i) that the revised regulations scheme of studies extending over a period of 4½ years is only apparently shortened and still there is considerable overlapping as in the teaching of Organic Chemistry—which is being continued, though there is no examination in this subject—this time can be devoted to Bio-chemistry; (ii) that the minimum age prescribed for admission to medical study should be raised to about 21 years—recalling Dr. Levine's statement that the average age of students admitted to the First Year of Medical Study is 20 to 21 in the U.S.A. (Dr. Samuel Levine—Chairman of the W.H.O./U.S.C. team of medical scientists, which visited Madras in February—March 1953); (iii) that proper consideration should be given to the health of medical students and that a strict and thorough check-up should be made compulsory before admission and thereafter at the end of every year; (iv) that medical education should be standardized and uniform in all Universities in India, so that medical graduates from any place can have equal status and recognition; (v) that there should be greater stress on practical aspects of the training even in student stage, opportunities being extended to all students to do simple diagnostic procedures and to assist in surgical operations and to attend to minor surgery independently and (vi) that common diseases of the state

and country should be taught thoroughly and rare conditions and more comprehensive and complete picture of medical knowledge can be expected and insisted upon later in the post-graduate stage.

Next, a representative of the newly admitted students of Madras Medical College, Mr. M. S. Chandrasekaran of the First Year Class, spoke. He referred to certain opinions expressed in the London Conference of Medical Education and criticised the present system of selection of students for admission to Medical Colleges and said the method of selection should be strengthened by adopting various recognized psychological tests to determine the suitability of students for medical studies. He was also of the opinion that the minimum age prescribed for admission to medical colleges should be raised.

Mr. Nerian Cornelio, Fourth year Student of Madras Medical College, was the last to speak and referred to the need for the planning of the medical curriculum with special attention to certain psychic requirements of the individuality of the student and the development of his personality.

Mr. T. S. Subramanian, Final Year Student, Madras Medical College, concluded the Students' part of the discussions by saying that almost everything that students would like to express had been said by one or other of the students who spoke in the meeting and stressed once again the need for value being attached to the teachers' observation and assessment of students and their regular work in the class room, wards and laboratories and added every effort should be made not to let down any student easily on the basis of his or her performance in the University Examinations, as it is well known to all that good students do occasionally happen to fall short of requirements, whenthey will need sympathy and help.

With this, one stage of the discussions came to a close and we had the pleasure of listening to the views of representatives of members of staff of the three medical colleges on the subject.

Dr. G. D. Valiath, Professor of Pathology, Stanley Medical College, speaking first, said that the objective of undergraduate medical education was to produce a general practitioner who could settle in any town or the countryside and practise medicine and surgery with a certain amount of confidence and self-reliance without being unduly dependent on external aids. The present training given to the students, he said, was not conducive to this idea. On the non-clinical side the students were taught by specialists who had nothing to do with hospital work or any practice and therefore they taught from the point of view of a specialist and not that of the general practitioner. On the clinical side the students were taught in well-equipped modern hospitals. This resulted in students

depending on reports for any diagnosis and there was a tendency among students not to learn by doing things themselves. Later when they set up practice they had to diagnose without the aid of these equipments and they would then find themselves in a difficult position.

Dr. Valiath felt that the present training did not stimulate the curiosity of the students. Under the present system only the Third Year students were allowed to visit the hospital. He suggested that medical students should be made to visit the hospital even from the first year so that they could get the mental impression of the various diseases and the correct diagnosis made by the senior physicians and surgeons. He thought that another drawback in the present system was that too much emphasis was given to the scientific aspect and that proper attention was not paid to the ethics and dignity of the medical profession. The emphasis he said, should shift from the in-patient department to the out-patient department.

Dr. D. Govinda Reddy, Professor of Pathology, Madras Medical College, briefly reviewing the students' views, said he was glad that they had not gone to the extent of saying that there should be no examinations at all. He said they had to have some system to test the efficiency of individuals in the various fields and anything better not being available, they had to continue with the examination system. With regard to admissions, he said that adopting better methods of selection was a matter which affected students to come and as far as students who had already succeeded in getting into the medical colleges are concerned, they should feel happy about it and realize that it was upto them to make the best use of the great opportunity which had been extended to them and try to become good, dependable and efficient members of the profession.

Dr. Paul W. Brand, Associate Professor of Orthopaedics, Christian Medical College, Vellore, speaking next, said that the examination system in India was similar to the one existing in the United Kingdom, but it would be better if they studied various alternative methods for testing the ability of students and adopted them here, if found suitable. He also commended the value of extra-mural clinical practice to students as pointed out by a student of their college earlier.

Dr. P. Kutumbiah expressed his appreciation of the high standard of the discussions. He said that psychological tests in the selection of students were useful only to some extent and that the methods employed in western countries did not suit Indian conditions. Referring to the suggestion that some of the exercises in experimental physiology designed to study the effects of physical agents and chemical elements on the heart, muscle and nerve of the frog and recording the results on smoked drums can be eliminated and substituted by demonstrations and film shows, he

said he was not agreeable to the arrangement proposed, as he felt students did learn by actually performing the experiments themselves and the benefit derived thereby is probably much more than is being realized by us. At the same time, he said, specially planned film demonstrations can be usefully employed as an additional feature of the instruction.

While appreciating the demand of students for opportunities for doing diagnostic procedures like lumbar puncture and sternal puncture, Dr. Kutumbiah felt he had to point out the other side of the picture too and he was not happy that students did not seem to be sufficiently keen about doing even simpler tests in laboratories like the macroscopic and microscopic examinations of specimens of urine, motion, blood smears etc., of hospital patients. He advised the students to make the best use of all the opportunities provided to them during the period they spend in the medical college. He felt that the emphasis should be on the scientific aspect of the study of medicine which would provide them a good foundation for future work.

Dr. C. K. Prasada Rao, Dean, Madras Medical College and Government General Hospital, Madras, and Ex-officio President of the College Association, proposed a vote of thanks.

10 DEC 1955
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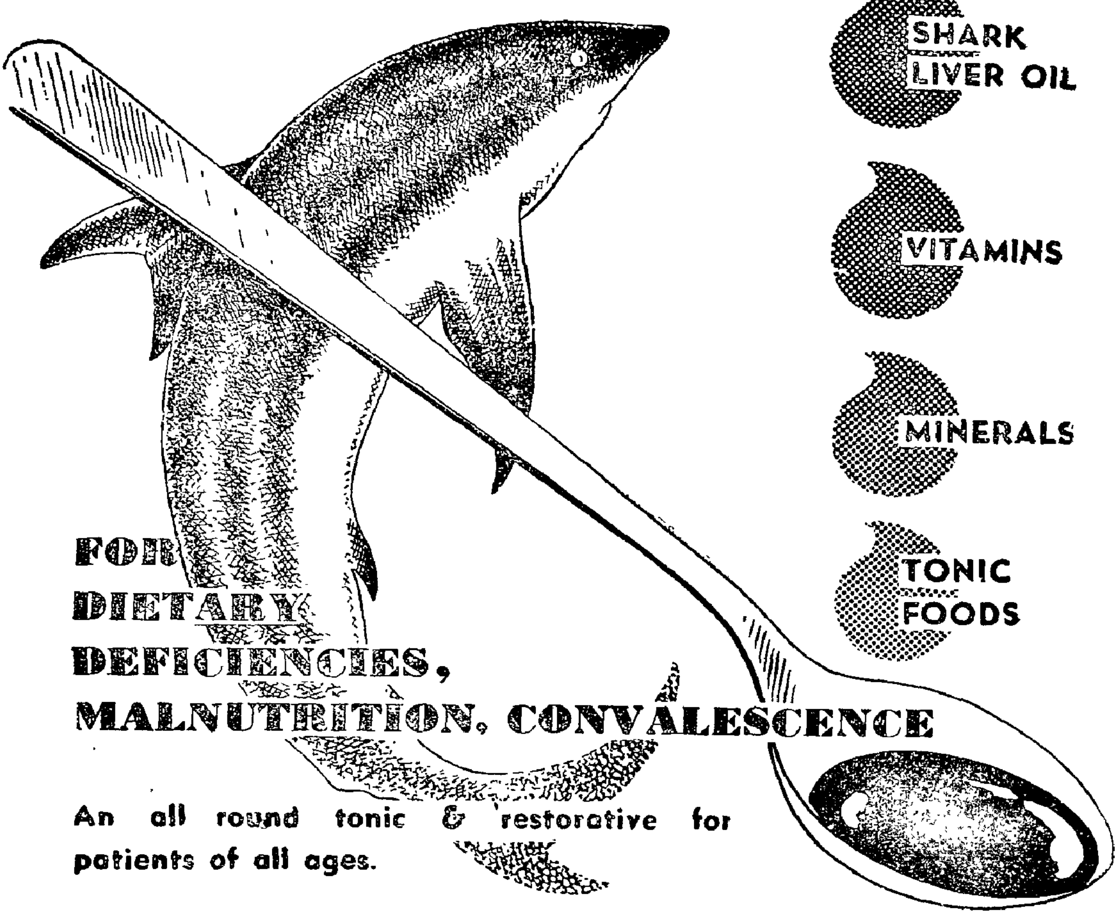

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